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ORIGINAL COMMUNICATIONS.

Cases of Obscure Pneumonia in Children, with Remarks. By J. Forsyth Meigs, M. D., Philadelphia.

(Read before the College of Physicians, Philadelphia, on Tuesday, Nov. 5th, 1850.)

I desire to call the attention of the College to a few cases illustrative of the difficulties which sometimes occur in the diagnosis of pneumonia in children. Inflammation of the lung is very easily recognized in early life, when it assumes, as it generally does, its frank and open form. When the rational symptoms of the disease, the cough, pain in the chest, rapid breathing, high fever and great thirst, are present in a marked degree, there is no difficulty in understanding that the patient is laboring under a pulmonary inflammation. The greater dryness of the cough in the beginning, the greater intensity of the pain, the higher grade of the fever, and the smaller amount of wheezing, as heard independently of auscultation, will almost always allow us to distinguish even between pneumonia and bronchitis, without a resort to the physical means of diagnosis. But when, on the

contrary, the local symptoms are slightly marked, or almost null, and when, from some peculiarity of the individual, the chief symptoms in the case are such as would seem to indicate disease of some other system of the body, as the nervous or digestive, the diagnosis of the pulmonary inflammation becomes exceedingly difficult, and to one who either neglects or is unable to avail himself of the benefits of auscultation and percussion, impracticable. So obscure, indeed, in some instances, are the rational signs of pneumonia in children, and so prominent are those appearing to indicate disease of some other part of the body, that the attention is drawn away almost irresistibly from the real seat of mischief, and the true nature of the illness is misunderstood, until, from the further development of the case, the pulmonary symptoms grow into greater significance, or from the very darkness which hangs over the diagnosis, the physician resorts to a thorough physical examination, and so detects the existence of the pneumonia.

Now the causes which tend to embarrass the diagnosis of this inflammation in children may be referred, it seems to me, to two principal conditions: first, that in children the nervous system is so much more susceptible to the action of disturbing agents, and therefore so much more apt to suffer derangement of its functions in all states of disordered health, that the symptoms issuing out of this circumstance assume at that period of life much greater severity and prominence than at later periods. Second, that in children the physical signs of thoracic disease are much more obscure and uncertain than in adults, because of certain physiological and pathological differences which characterize the former age, and because of the obstacles presented by the general unwillingness, or even refusal of the child, unless constrained, to submit to the examination.

That the nervous system is especially subject to derangement in children is so trite an observation in medicine, that it scarcely needs any comment on my part. Nevertheless, I will recall to your memories the great frequency of spasmodic and convulsive disorders, and of organic diseases of the nervous system in early life. How frequently, moreover, do we see children presenting the most serious, nay, the most dangerous nervous symptoms, in

disorders which in adult patients would be regarded as trivial, or at least entirely destitute of danger. How common to meet with the most violent fever, with alarming jactitation, with irregular and tremulous muscular movements, with delirium, drowsiness, stupor, or coma, with terrifying convulsions, and even with fatal congestion of the brain or apoplexy, in cases of simple indigestion or of intestinal disorders, in the fever depending on simple angina, and at the onset or in the course of the different fevers and phlegmasiæ. These things happen daily. They are common in the experience of every man conversant with the diseases of infancy and childhood. Need we be surprised, therefore, to find this class of symptoms occurring frequently at the beginning, in the course, or at the termination of pneumonia, one of the most severe and dangerous inflammations to which the constitution is subject? And is it not easily to be understood, also, that, when such symptoms make their appearance in a marked form in the pneumonia of children, and especially when they occur at the onset of the disease, they must more or less confuse and embarrass the diagnosis. How can it be otherwise? A sick child has violent fever, drowsiness, stupor or delirium, sensibility to light, headache, vomiting, perhaps constipation; when partially aroused he is irritable and his movements are tremulous: he has few or none of the rational signs of pneumonia; little or no cough; no complaints of pain in the chest; on the contrary, he complains only of pain in the head; his respiration is more frequent than natural, but less so than in ordinary frank pneumonia;—how, I will ask, is one to escape from the idea that a child presenting these symptoms is laboring under some inflammation of the brain? It is most certainly an embarrassing and delicate point to judge upon.

But the diagnosis of pneumonia is rendered obscure and difficult in children, not only by the greater irregularities observed in the rational symptoms, but also by certain conditions which make the application of physical exploration in subjects of a tender age less useful than in those who have reached the period of maturity. Amongst these conditions the most prominent are the following: The thorax is naturally so much more resonant in early life as to afford a much less certain indication,

by dulness on percussion, of the presence in the thoracic cavity of conditions diminishing the amount of inspired air; or, in other words, the healthful sonoriety of the chest is so great as to permit of a certain degree of induration of the tissues of the lung, which yet shall not be appreciable to an ear of ordinary acuteness or cultivation, because there still remains an amount of sound on percussion sufficient to deceive the great majority of observers.

A second cause of difficulty, connected, like the last, with the physiological construction of the thorax, is the fact that the respiratory murmur in the child is much louder and stronger than in the adult; it is, in fact, puerile; it has somewhat of a blowing or bronchial sound, and therefore renders the detection of bronchial respiration, one of the most important signs of pneumonia, much less easy and positive than during the maturer periods of life.

In addition to these two causes connected with the physiological conditions of childhood, we have certain pathological states to increase the embarrassment under which we labor. The most important of these is, that pneumonia is so often double, as to make us lose very frequently the advantage of the comparison of the two sides; and unless care is observed, the physician is led into error, by falsely concluding from the fact of the two sides being equally sonorous, that the sound he elicits is natural; whereas, in truth, both sides are considerably duller than they ought to be. Again, from some cause, crepitant râle is much less to be depended upon in the child than in the adult; either because it is really absent, or because the ear is unable to detect it, owing to the child's refusing or being unable to distend the thorax sufficiently to cause the air to enter a sufficient number of the air-cells to produce this particular morbid sound.

Last, but not least, our means of diagnosis are still further restricted by the opposition which the child so often makes to the examination. Who has not been annoyed and tormented, and even foiled, when the case is an obscure one, and therefore requiring great delicacy of perception, by the patient's resisting with cries, and screams, and struggles, every attempt at a proper exploration? Or, if not foiled, how much more uncertain and

unsatisfactory are the results obtained under these circumstances, than they are in the instance of adult patients.

After these prefatory remarks upon the subject to which I have requested your attention, I shall proceed to relate the history of three cases that occurred in my own practice—cases which I hope will not weary, by their detail, the patience of the College, since they are strongly illustrative of the perplexing symptoms which sometimes accompany, and which tend to mask the pneumonia of children.

The first case is one in which the onset of the disease was so much like that of meningeal inflammation, as to render the diagnosis very difficult in its early stage. It is as follows: A fine, hearty boy, between six and seven years of age, born of very healthy parents, both of whom were living, had an attack of anginose scarlatina, of moderate severity, in the month of April. He recovered from this sickness without any difficulty, and resumed his attendance at school. On Wednesday, the 15th of May, he was seized with the symptoms of cold in the head, and had some fever, and a severe earache. On Thursday he was much better. On Friday he was rather imprudently taken out to ride, the weather being raw and disagreeable, and he consequently fell sick again on the evening of that day. The next day, Saturday, he had violent fever, much pain in both ears, severe frontal headache, and great sensibility to light when exposed to it. He was at the same time very drowsy, sleeping nearly the whole day; but could be roused when loudly and vehemently spoken to, so as to answer a few questions, and manifest great irritability. There was, in connection with these symptoms, frequent vomiting. The bowels had not been moved. There was no cough whatever. The respiration was slightly quickened. I suspected an attack of pneumonia, but could not detect it upon the most careful examination. I prescribed for him two grains of calomel in a dessert spoonful of castor oil, and a strong mustard foot bath.

On Sunday (2d day), the symptoms were much the same. The headache was very severe, and the only thing complained of. The sensibility to light continued excessive. There was frequent vomiting, the smallest quantity of water even, being generally

rejected at once. The bowels had been freely moved. There was no full cough, but he had given a short hack two or three times. The respiration was decidedly accelerated, rising to 35 or 40. The skin was hot and dry, and the pulse 130 in the minute, and at the same time rather hard, but perfectly regular. I still suspected pneumonia, but could not help feeling uneasy in regard to the brain, particularly as the most careful exploration failed to reveal any signs of pneumenia. I ordered iced lemonade and sweet spts. of nitre as the remedy, with cloths wet with cold water to the head, a mustard foot-bath twice a day, and a mustard poultice to the epigastrium.

Monday, (3d day.) No change, except that the respiration has risen to 45 in the minute, unattended, however, by any labor or difficulty whatever. He has coughed three or four times again. The cough is short and dry, and not painful. The pulse is 132, jerking. The vomiting continues with most distressing retching. The tongue is clean, moist, and disposed to be reddish. Auscultation to-day reveals well marked bronchial respiration before and behind, over the upper lobe of the right lung, but no râle whatever. Over the same region the percussion was dull. The prescription was leeching to four ounces over the right scapula; acetum opii, one drop every two hours; a mustard poultice over the front of the thorax, and a mustard foot-bath.

Tuesday, (4th day.) Better. Less fever. Less headache. Eyes not so sensitive to light. Vomiting has moderated, though it still recurs from time to time. To take the black drop occasionally.

Thursday, (6th day.) The fever has disappeared. The cough is much more frequent than before, and loose. Percussion over inflamed point less dull. The bronchial respiration is being replaced by vesicular murmur. Black drop at night; diet to consist of milk and bread, ice cream, etc.

Saturday, (8th day.) The patient is convalescent. He coughs but little, not more than half a dozen times a day, and then loosely. There is no fever. No vomiting for the last two days. Head clear. Tongue red, clean, moist. No appetite. No pain of any kind. Sleeps well and takes no medicine. The dulness on percussion is diminishing, though still very clearly

marked. Bronchial respiration much less distinct. To-day, for the first time, I can hear, just at the end of a long inspiration, which he now voluntarily takes for me, a very fine, but distinctly perceptible crepitant râle.

From this time he rapidly and entirely recovered.

Remarks.—This case appears to me a very interesting one from the obscurity which attended it at the onset. A healthy boy, between six and seven years old, who has had a slight cold in the head, with earache, but who has apparently recovered, is taken out to ride. On the evening of that day he falls sick again, and on the following day when I see him, I find him suffering with severe fever, violent headache and pain in both ears. He is at the same time exceedingly drowsy and inattentive, and when partially roused from this condition, complains bitterly of the light, and is very cross and irritable. He has no cough whatever, and, beyond slightly quickened breathing, no symptom of thoracic inflammation. He has frequent vomiting, rejecting nearly every thing that he takes, even to water. His bowels had not been moved within a day.

Now what was the nature of this attack? Was it meningitis? Scarcely tubercular meningitis, since the attack was so sudden, and the patient healthy, and descended of vigorous parents. Was it acute simple meningitis? This was more probable, especially if we adopt the idea of an extension of inflammation from the structures of the ear to the coverings of the brain. But there was no delirium whatever, which there would probably have been had meningeal inflammation gone far enough to have produced the drowsiness and sensibility which the child evinced. Moreover, the pulse was not over 130, and the skin not intensely hot, which would almost certainly have been the case had the attack been one of the kind I am supposing. Add to these considerations, those of the child's having had a cold, and just as he was recovering, having been exposed during a ride to a raw May wind. Explain his vomiting by the circumstance that he and all his brothers, of which there were several, inherited from their mother a strong disposition to that symptom in all their attacks of sickness, and I think there were reasons enough for hoping that the nervous symptoms, under which he labored, and which,

for the time being, were the only ones he presented, depended not upon cerebral disease, but were sympathetic merely with some local inflammation of another and distant organ, and what organ so likely to be the seat of the trouble, as the lung?

On the next day, when I heard that he had coughed several times, that the bowels had readily responded to medicine, and that his nervous symptoms had made no progress, which they ought to have done, had they depended on inflammation of the meninges, I felt still more convinced that the case must be one of pneumonia, though I could not as yet detect any signs of that disease by the most careful physical exploration. On the third day, however, the nature of the attack became clear and decided, for I detected dulness on percussion and bronchial respiration over the upper lobe of the right lung. There was no longer any doubt or obscurity, though the stupor, sensibility to light and vomiting, remained unabated.

I shall next detail the history of a case intended to show how serious and how conspicuous the nervous symptoms sometimes become in the latter stages of pneumonia. I select this case because it affords a very strong example of the extreme gravity which this class of symptoms occasionally presents at that period of the disease, and because also it shows how mistaken is the notion that severe cerebral symptoms occurring in the course of various local inflammations depend generally upon a transfer of diseased action to the brain: whereas, in fact, they are almost always merely sympathetic phenomena; or still more frequently, are occasioned by that state of the blood which comes at last to be produced by the imperfect performance of the hematosic function in diseases of the respiratory organs, or by the debilitating influence of long sickness, and insufficient supplies of food in diseases of other parts of the body. The case is as follows: On Thursday, the 21st November, I was requested to take charge of a child, who had been ill for seven days under the care of another physician. I was sent for because the original attendant had been obliged to leave town. I was told that the case was one of cold on the chest, in which the disease had left the chest to remove to the brain; that the child was entirely unconscious, excessively prostrated, and, in fact, supposed to be in a dying con-

dition. The parents hoped for nothing from medical treatment, but wished that everything might be done to satisfy their sense of responsibility.

The real history of the case prior to my first visit was this: The patient was a girl between two and three years old, of rather delicate appearance, though seldom sick, and the child of delicate parents, the father having been attacked since his daughter's illness with hæmoptysis followed by many phthisical symptoms. She was taken sick on the 29th of November with slight laryngitis, threatening croup. This was followed by mild catarrh, of which she convalesced on Monday, the 4th of December, under the care of the family physician. She remained well now until Tuesday, December the 12th, when she was again seized with cough and fever, and the physician was again sent for. This gentleman now attended her daily until Saturday the 16th, when he thought her better. During these five days she had cough, quick breathing and fever, and on Thursday morning some threatening brain symptoms, for which a blister was applied to the nucha. On Sunday, the sixth day of her sickness, she was dull and indifferent. On Monday she scarcely recognized her mother, and on Tuesday not at all. During all this time, and up to Thursday, Dec. 21st, the tenth day of the sickness, when I first saw the child, she had had no spontaneous vomiting, but had vomited several times after taking her medicine, which consisted of a calomel and tartar emetic mixture. She was not constipated, but had regular daily evacuations. The treatment had consisted at first in the use of a calomel and tartar emetic mixture, and afterwards of blue pill and rhubarb. A blister had been applied to the nucha as already stated.

At my first visit, on the 10th day of the sickness, I found the patient, in truth, in a most alarming condition. My notes give the symptoms as follows: The face is pale and even white, the eyes closed, and the expression dull and stolid. The lips are of a pale red tint, and dry and cracked. The child is very drowsy, indeed almost comatose. She can be roused with great difficulty only enough to glance around languidly and heavily at my watch, for a moment, and then immediately relapses into coma. The eyes are dull and dim, and there are many incrustations

about the lids. She neither speaks nor attempts to speak; she recognizes no one, and has neither asked nor made any sign indicative of a wish of any kind. There is no appetite, and no thirst. The pulse is frequent, small, and feeble, and the hands and feet cold, requiring bottles of hot water to maintain any warmth in them. The head and throat are slightly warmer than natural, but not hot. The respiration is 52, short and noiseless, except that a fine wheezing can be heard when the ear is approached near to the chest. There is very little cough—it is short, slight, and rather loose. Auscultation reveals subcrepitant râle over both sides behind. Percussion affords nothing very decided.

I ordered a mixture consisting of six grains of carbonate of ammonia and twelve of quinine in three ounces of vehicle, of which a tea-spoonful was to be given every two hours. A dessert-spoonful of wine whey was to be given every two hours also, and a table-spoonful of chicken tea occasionally. A blister an inch and a half square was applied to the calf of each leg, to be removed at the end of an hour and a half or two hours; and bottles of hot water were kept in contact with the feet, and laid along the sides of the body.

11*th day.*—No very decided change, except that the extremities are somewhat warmer, the pulse a little fuller, and the patient rather more easily roused from her state of insensibility. The remedies to be continued, and a cathartic enema to be administered to open the bowels, which have not been moved.

12*th day.*—Injection operated once last evening. Bowels opened again this morning. Stools natural. Temperature good. Rather more color in the face. Patient more intelligent, and much more easy to be roused; observes her mother and recognizes her for the first time, but makes no attempt to speak. She is very weak, trembling very much on the least attempt at motion. Pulse fuller and stronger. Respiration easy. Takes her food readily. Continue treatment.

13*th day.*—Decidedly better. Is now wide awake, with a natural and intelligent expression of countenance. Face much less pale; lips well colored, and less dry: eyes less dull; evidently recognizes those around her, though she does not attempt

to speak as yet. Whole surface warm and dryish, and the hands rather hot indeed. Pulse 120, fuller, and stronger, though still small. Respiration 60, not quite regular, short but without any labour. Cough much more frequent than before and stronger. It occurs sometimes in spells, and is disposed to be loose, though still rather hard. No vomiting. Bowels opened twice since last night; the dejection being natural, but rather free. Takes her food very well. Not very thirsty. The abdomen is somewhat full, but soft and supple; some tympany. The patient picks her nose and lips a great deal, and on the 9th and 10th days picked the skin over the neck and upper part of the sternum so much as to produce angry looking pimples and excoriations. Auscultation reveals to-day vesicular murmur, rather feeble, over the front of the thorax, vesicular murmur over the upper part of the chest behind, and fine subcrepitant râle with bronchial respiration both in inspiration and expiration, over the lower half of both sides behind. Percussion is somewhat dull over the lower part of the dorsal region, and is rather less clear on the right than on the left side.

The carb. amm. and quinine mixture is to be suspended, and a teaspoonful of a mixture consisting of four grains of iodide of potassium in half an ounce of sarsaparilla syrup, and an ounce and a half of water, is to be given every three hours; wine whey to be continued. Diet to consist of chicken tea, and milk and water. One grain of Dover's powder, to be administered every evening.

On the 14th day the child cried loudly and obstinately for the first time, and for the first time in many days, shed tears. The pulse was 124, of good volume, soft, and regular. The breathing was 70, high, regular, and without effort. Skin warmer than natural, and dry; tongue moist, and covered with dark brown fur.

On the 16th day, I found her slowly improving in strength. She now remains awake the greater part of the day, and is much amused with her toys; the appetite is moderate, and the thirst not too great; the cough is more frequent, occurs in spells, and is rather hard. Has had no natural stool to-day; the pulse is between 120 and 130, rather small and feeble; the breathing

is 50, still high, but not labored. The respiratory sound is feeble, and attended with some expiratory blowing, and a fine rare subcrepitant râle over the lower half of both lungs behind; percussion over same regions is slightly duller than natural, and a little more so on the right than on the left side. Tongue clean and moist; lips dryish, and much picked at by the child; abdomen natural; soft. Sleeps well at night with the Dover's powder.

The mixture of Iod. potass. to be continued; milk punch to be be given in the dose of a tablespoonful every three hours. Ice cream, rice gruel, and a little chicken for diet. The grain of Dover's powder to be given at night.

From this time the patient continued to go on very favourably in every respect, so that on the 21st day of the illness, the pulse had fallen to 95, and the respiration to 35; whilst the strength was rapidly improving, and the cough had become much less frequent and looser. The bowels were regular; there was no diar. rhœa. The appetite was increasing, the thirst had disappeared, and the spirits had become much more cheerful and pleasant.

The Iod. potass. was suspended on the 18th day, and a little syrup of ipecacuanha and sweet spirits of nitre substituted; a few drops of brandy were given several times a day in the place of the milk punch.

On the 24th day, the patient was entirely convalescent, as she was gaining flesh, and was able to sit up and amuse herself.

Remarks. When I was called to see this case, it was supposed by the family, who were guided by the opinion of the first physician, to be one of disease of the brain, and on that ground was thought to be desperate beyond hope. The opinion of the first practitioner was clearly indicated likewise, by his having applied a blister to the nucha on the third day of the attack, in consequence, it was stated, of some threatening brain symptoms. Upon first seeing the patient indeed, and noticing the extreme stupor, amounting very nearly to perfect coma, I was for a time apprehensive that the case was in reality one of those fatal affections of the great nervous centre, which so rarely yield to the art of

the physician. As soon, however, as the history of the case had been fully detailed, I was led to form another opinion in regard to its nature, and one, too, which allowed me to hope that it might yet be turned from the dangerous direction which it had assumed. In fact, the onset of the attack was evidently that of a pulmonary inflammation, and not of cerebral disease. The cough, the quickened respiration, the absence of spontaneous vomiting of marked constipation and of delirium, all looked unlike the approach of meningitis;—and when, in addition to these circumstances, I found that there still remained some glimmering of intelligence, that there had been no spasmodic phenomena, that there was neither dilatation of the pupils, nor irregularity in the direction of the eyes, and that a proper examination of the rational and physical respiratory symptoms, shewed clearly that the child was affected with an extensive catarrho-pneumonia, I had no hesitation in believing that the real disease was inflammation of the bronchia, and of the parenchyma of the lungs, and that the dangerous nervous symptoms which had created so much alarm and even hopelessness, were not primary phenomena, and therefore almost necessarily fatal, but merely secondary or consequential, and for that reason, very much less to be dreaded. Guided by this view of the case, I determined to sustain, and, if possible, to revive the sunken forces of the patient, and by thus gaining time, and restoring to the circulatory and nervous functions, some degree of energy, I hoped that nature might yet be able to carry on the changes necessary in the diseased structures, to restore to them their healthful condition. Effectually, after a few days, I had the great satisfaction to behold my efforts crowned with success. As the pulse became fuller and more active, as the diminished calorific power became invigorated, and as the digestive and absorbing functions grew stronger and more capable of fulfilling their offices, I could perceive that the respiration was augmented in frequency and power, that the cough became more frequent and looser, and that the lungs were gradually and surely relieved of the products of inflammation, which had previously been obstructing and impeding those changes in the blood, which are so essential to the due extrication of the life forces.

I shall now proceed to the history of the last case by which I aim to call the attention of the College to the point I am endeavoring to elucidate; to wit, some of the conditions which so often complicate and obscure the diagnosis of pneumonia in children.

Should I succeed, by my remarks upon this subject, in throwing some light upon a difficult point in practice, or in drawing out from the older and more experienced members of the College, a portion of their accumulated share of experience, I shall not deem the time so boldly occupied by myself this evening, to be wholly misspent.

The subject of the case was a boy between 4 and 5 years of age, of healthy and robust appearance, and born of parents of good, though not vigorous health. This child was seized suddenly, six weeks after an attack of measles, of which he had apparently entirely recovered, with violent fever, great restlessness and distress, vomiting, and distension of the abdomen. When I first saw the patient, these were the only marked symptoms he exhibited. There was nothing to call my attention particularly to the thorax, and I was led to suppose that the fever depended on some gastro-intestinal disorder, from improper eating. A dose of castor oil was administered, to be followed by sweet spirits of nitre, and a warm bath was ordered. On the second day he was much worse. The fever was very high, the skin being hot and dry, and the pulse 160 in the minute by the watch, and jerking. He was now very drowsy and heavy, it being almost impossible to obtain any answers from him, and when obtained they were confused and unintelligible. When disturbed by the examination, his movements were tremulous and uncertain. The tongue was dryish, and very thickly coated. He complained confusedly of pain in the abdomen, which was still distended and sonorous on percussion. There was no sign of respiratory disease, except some quickening of the breathing, and a very slight cough, scarcely to be noticed. I began to suspect that the attack was one of scarlatina, from the extreme quickness of the pulse, which continued at 160 in the minute, from the drowsiness, and from the tremulous, almost spasmodic character, of the muscular movements. Fortunately, however, I was induced, by the obscure character of the symptoms, the increased frequency of the breathing, and the occasional occur-

rence of a slight cough, to auscultate and percuss the chest. This I was enabled to do only very hastily, and with much difficulty, owing to the boy's unwillingness to submit to the necessary position. I found that the respiration was feeble and obscure over the lower part of the left side behind, and that the percussion was dull over that region. This determined me at once as to the real nature of the sickness. It was pneumonia. I bled him immediately to five ounces from the arm, which I had feared to do before, lest the attack might be one of scarlet fever. Two hours after the bleeding, the pulse had fallen to 140 from 160, which it had been before. The heat of the skin was very considerably diminished soon after the abstraction of blood, and the patient passed a quiet night. The internal remedy consisted of very small doses (30th of a grain) of tartar emetic, with sweet spirits of nitre, every two hours. On the following day, the third, he was much better; the drowsiness and disposition to coma having passed away, the movements become steady, and the heat of skin much reduced. On the fourth day he was out of danger. As the case went on, the signs of pneumonia became unequivocal. The blood drawn on the second day presented a firm, small coagulum, covered with an abundant buffy coat. The recovery took place in the ordinary time, and was perfect.

Remarks.—This case was rendered obscure by the facts that the nervous and abdominal symptoms were so severe and prominent as to mask almost entirely the thoracic symptoms. The pulmonary symptoms were indeed not only concealed by the superior and unusual conspicuousness of the nervous and abdominal phenomena, but they were themselves much less marked than in ordinary attacks of pneumonia. It may seem a very easy task to any one who has heard the above case detailed, to have made the diagnosis of pneumonia. But let him who so thinks, imagine a boy between 4 and 5 years old, of nervous and vehement disposition, somewhat spoiled in temper withal, to be taken sick suddenly, with violent fever, pain in the abdomen, flatulent distension of the bowels, so little cough as not to be noticed by the attendants, no evident labor of breathing, heavily coated tongue, and strong disposition to drowsiness. Suppose the child to be still worse on the following day, with a pulse at 160; with stupor, amounting almost to coma; tremulous and

uncertain movements; confused complaints of pain in the stomach; distension of the abdomen; a cough, so slight as to be recollected by the attendants only after the strictest examination; no labor of respiration, but merely such an acceleration of its rate as would almost infallibly accompany a pulse of 160: suppose, too, that all this occurs during a season when scarlet fever is prevailing epidemically, and I will ask any one here present, whether the symptoms were not such as might readily lead the mind to suspect an attack either of scarlatina, or, if the abdominal symptoms were chiefly considered, of typhoid fever, rather than one of pneumonia? In fact, I was assisted in the case by a most acute and experienced practitioner, and he was even more disposed than myself, to conclude that the attack was a scarlatinous one, in which the eruption had failed to make its appearance. Fortunately, as has already been said, I was induced, after finding out by minute inquiries of the attendants, that the patient had coughed a few times, to examine the chest; and though the examination was necessarily rapid and imperfect, the result was such as to convince me that the disease was a latent pneumonia. The bleeding and tartar emetic, which were employed as a consequence of this discovery, exerted a most satisfactory influence upon the symptoms, and the child was very soon out of all danger.

I regret, gentlemen, that the details of the case last read to you are so meagre and imperfect, but I give them from my notebook as they were written down under a press of occupation. I can safely, however, make the assertion that they are correct as far as they go; and I have not been deterred, therefore, by the want of greater copiousness of detail, from offering the case to the College as an example of the obscurity which sometimes occurs in the diagnosis of pneumonia in children. I will take this occasion to remark, moreover, even at the risk of wearying your patience, that it has often seemed to me that the dread of not being able to describe a case with all the elaboration and minuteness of finish which is the fashion of the day, has probably prevented not a few of our profession, who are busily engaged in private practice, from attempting a record of the cases which come under their observation; and that the consequence of this may be that many important facts are thus lost

to the profession. And yet, surely, a short and even imperfect sketch of a case, written down at the moment of its occurrence, is worth more than a mere recollection, and especially than no record whatever, either memorial or written. If, indeed, a practitioner who has had any considerable share of private business, waits to take notes of his cases, until he can do so with the detail and accuracy of a Louis or an Andral, he would, I suspect, leave but few mementos of his labors. Far be it from me to undervalue the exact and rigorous method of observation insisted upon by the great men of the modern school of medicine,—a method which has given to our science its most useful and durable monuments.

But, let us not, in our admiration of the complete and perfect works of our masters in medicine, contemn the efforts of more modest and humble laborers, since, after all, it is only by slow and patient progression through successive degrees of excellence, that man ever attains that exquisite finish which renders the arts and sciences in their consummated perfection, so attractive to all the finer parts of our nature.

Case of Gun Shot Wound,—Death. Reported by WILLIAM HUNT, M. D., Resident Surgeon of the Pennsylvania Hospital.

John Farley, aged 11. Was admitted into the Pennsylvania Hospital on the evening of April 18th, 1850. The person who brought him stated that he was shot through the hand, during a firemen's riot in Moyamensing. Such was found to be the case; a ball had passed through the left hand, between the heads of the first and second metacarpal bones: but the constitutional symptoms were so severe, that this wound alone was not sufficient to account for them; he was cold, exceedingly prostrate, and alarmed, and had a quick and almost imperceptible pulse. On further examination it was found that he was also shot through the left shoulder, the ball having fractured the head of the humerus and opened the joint. The ball could not be felt by the probe, which might have readily been passed into the wound further than was considered prudent. The patient was placed in bed, a piece of dry lint was applied to the wound, heaters

were put to the feet, and sinapisms were ordered to the stomach and extremities; small quantities of wine and water were given at short intervals.

On uncovering the boy, to apply the mustard, it was noticed that the penis was gradually assuming the state of priapism, which soon became complete; this was followed by perfect paralysis of the lower extremities, both of sensation and motion.

These symptoms induced a close inspection of the back; nothing could be seen or felt of a foreign body, nor was there any other external wound than those mentioned. There was no paralysis of the upper extremities. The diagnosis, founded on these facts, was, that the ball had passed through the shoulder into the thorax, and had then travelled along its posterior parietes as far as the vertebral column, which was fractured at a point below where the brachial nerves are given off: the prognosis of course was fatal.

Carbonate of ammonia and brandy were given, in small doses, every half hour, until three doses were taken.

11 o'clock, P. M. Saw patient, with Dr. Peace. Symptoms not improved. Again examined the back and shoulders closely, but could detect nothing.

Quarter to 12. Little warmer; pulse still very feeble, not to be counted. On auscultation, found respiration very quick and loud, and a distinct friction sound was heard on the left side; paralysis and priapism continue. The patient is, and has been, perfectly conscious; complains none of pain, excepting when the wounded arm is disturbed.

1 o'clock. Warmer; pulse fuller; has passed a small quantity of blood from the mouth; some tendency to delirium. Expressed a desire to pass his water; a small catheter was introduced into the bladder, very little urine followed; paralysis and priapism continue, although latter not so perfect as before. Directed the patient to be kept quiet, and to take a small quantity of wine and water two or three times during the night.

16th, 7 A. M. Skin hot; tongue furred; respiration hurried and feeble; pulse full, very quick; paralysis and priapism as before; consciousness perfect.

9 o'clock. Skin hot; pulse 130; respiration 40, is feeble on the left side; cardiac sounds heard more distinctly to the right of sternum; no pain; drew off a small quantity of water by

catheter. At 10, ordered an injection of oleum ricini, f.ʒi., with molasses and water, Oss.

5 P. M. Complains of some pain in the breast, none in wound; drew half a pint of water from the bladder, high colored; bowels had been opened by the injection.

At 7. The abdomen was very tympanitic. ℞. Oleum Terebinth. f.ʒij., aquæ Oss., inject.

17th. Has had a restless night, been somewhat delirious; paralysis and priapism continue; abdomen less tense since the injection; pulse 130; tongue moist. Complains only of pain over front of chest; respiration labored; had five dry cups applied over chest, with some relief; obliged to draw off his urine twice daily; wound discharges very little; no swelling about the shoulder.

18th. Better, as regards respiration; pulse 120; urine plentifully secreted; bowels opened by injections; other symptoms the same.

19th. Better; pulse 112; tongue moist, slightly coated; respiration easier; secretion of urine very copious; obliged to introduce catheter four or five times daily; the penis is more rigid when the bladder is full. The patient never expresses a desire to urinate when alone, but he has frequently wished to do so while the water was flowing in a full stream from the instrument, of which he appears to be wholly unconscious.

3 P. M. Weaker; pulse very feeble, 120. Gave f.ʒss. of wine whey every two hours; this, at 8 o'clock, appears to have made him stronger; he ate a piece of toast with appetite, and was quite lively.

20th. Weaker; pulse 120; has involuntary discharges from the rectum. The urine is now loaded with a ropy mucus, and gives out a strong ammoniacal odor; not so plenty as before. Wound in shoulder discharges a light sanious liquid; no abatement in the priapism or paralysis.

21st. Continues as yesterday in every respect, but as to the urine, which now dribbles from him involuntarily.

22d. About the same. No pus is discharged from the wound; pulse 140.

23d, A. M. Pulse 120; says he feels well; priapism appears to have somewhat abated. P. M. Much worse; abdomen very

tumid; priapism again perfect; urine still dribbles; pulse 166; respiration 50; tongue moist and furred; wound discharges but little of a light sanious liquid. ℞. Oleum Terebinth. f.ʒi, aquæ Oss. inject.

24th. Better; bowels had been opened; pulse 140; tongue clean, moist; appetite good; no swelling about the shoulder.

25th. Has remained all day without change; examined the back this morning. There is much more protuberance of the left inferior part of the thorax than the right; percussion dull, and respiration heard very indistinctly on that side.

26th. Much edema of prepuce; priapism still perfect; otherwise the same.

27th. The edema of prepuce is so great as to produce paraphymosis; this cannot be reduced, on account of the erect state of the penis. It was freely punctured, and the swelling was much diminished by night; there is no sensation in the organ.

28th. Same.

On the first of May the writer was obliged to leave the Hospital on account of sickness. The patient remained about the same until the 3d, when he sank rapidly, and died in the evening; the priapism continued until the day of his death. Consciousness remained perfect.

The post mortem examination (of which the writer is unable to obtain any full notes) showed that the ball had passed through the shoulder, producing a compound comminuted fracture of the humerus, just below its head, and had opened the joint; it then entered the thorax between the 2d and 3d ribs, and passed obliquely downwards through the pleura and posterior part of the lung, then through the body of the 5th or 6th dorsal vertebræ, which was fractured completely through. The ball was found lodged in the spinal canal, at a point corresponding to the fracture.

The spinal marrow was softened, to a considerable extent, above and below the wound. The left lung was hepatised, and there was a large effusion of pus and bloody serum into the pleural cavity.

Remarks on California. By G. R. B. HORNER, M. D., U. S. N., late Fleet Surgeon, Pacific Squadron.

Though many letters have been written concerning the above country, but few have contained medical information—and this has come mostly from unprofessional sources. The letters written have been generally about the gold mines, and have imparted little knowledge respecting the climate, productions of the soil, or other subjects calculated to interest a physician or other persons wishing for information, special or general. I shall then endeavor to present such as I was able to collect during my sojourn there, which was from August, 1849, to the middle of last July. More than half that period was passed at Benicia, and a greater part of the remainder at, and in the vicinity, of St. Francisco. A short time was spent in travelling to the northern mining region. My public duties in our squadron, the great difficulty in procuring means of conveyance from many points to others, and the enormous expense attending it, prevented me from making as minute or general observations upon the country as I desired. Such, however, as seem worthy of it, I will now make known.

On entering the bay of St. Francisco, the most conspicuous points of land are the Paps, Table Mountain, and ridges encircling it on every side, partly clad in pines and oaks, interspersed with some other trees, but mostly bushes. Between the city and ocean the country is formed of sand-hills and mountains, intersected by deep ravines and valleys. The soil there is mostly barren, but in some portions has a dark mould, intermixed with clay, and is productive, when carefully cultivated. Opposite the city, and on the eastern side of the bay, the country is fertile; and in some parts hilly and mountainous a short distance from the water. At the back of the ridge near it, may be seen the top of the Devil's mountain, the highest one in that portion of the country. It rises nearly four thousand feet above the ocean, and is one of the best land marks for vessels plying up and down the bay, and the two great rivers, discharging into the most eastern part of it, termed the bay of Suison. These rivers are the Sacramento and St. Joaquim. The first runs nearly south, the second to the north.

Both derive their chief sources from the western face of the Sierra Nevada, overflow their banks, and are bordered by an exceedingly rich, alluvial soil. The banks of the Sacramento, I found in July, when the water was of medium depth, not more than twenty feet above it on either side, and covered almost without interruption, for ninety miles above its mouth, with a dense growth of cotton wood, oaks, willows, sycamores, and bushes. Back of the woods are plains of great extent, which are inundated in winter. Marshes, called tulas, exist in certain parts, and form islands of great extent, where the two rivers disembogue. North and south of that portion of the bay designated the straits of Karquines, which lie between the bay of Suison and St. Paul's, or the north-western part of that of St. Francisco, the country is formed of lofty, rounded hills. Those on the northern side are clad with a luxuriant crop of wild oats during the spring and summer, and those on the southern side are covered with them, and a scattered growth of low wide-spreading horse-chesnuts and oaks, mingled with some elders and sycamores on the low grounds and along the banks of streams. Fennel, a bulbous plant, used for washing, a very large tuberous root, (fig. 1) belonging to a vine called wild cucumber, like

Fig. 1.

a sweet potatoe, the endive, wild artichoke, and a multitude of flowers, are likewise productions. Of the oaks there are several kinds, the most remarkable of which are those bearing an acorn two or more inches long, and a dwarf oak noted for its exceedingly poisonous effects. By contact, and it is believed, in certain cases, by merely allowing the effluvia from it to touch the skin, these effects are produced. I saw an officer of our squadron with his face so swelled that he could hardly see, and yet I understood

from him he had not touched the plant, and could have been poisoned only by lying upon the ground where it was growing. This oak is a very small bush, bearing a reddish, somewhat serrate, and oval leaf, quite as large as those of the other oaks. Their foliage is very deficient, the nerves of every leaf end in points, forming quite sharp prickles, which are undoubtedly owing to the great drought of every year, parching the leaves, and taking away all moisture from the ground. So completely dried is the soil, that on hills, in plains and valleys, it cracks in every direction for one or more inches in width, and several feet in depth. The richer the soil, the more thoroughly it has been soaked by the rains of fall and winter, the more it bakes and fissures. When this begins to occur, grass, wild oats, and flowers begin to wither, and by July have changed their rich color to a pale yellow. Springs then become dry, brooks and rivulets disappear, and fires begin to sweep over the prairies and tulas, borne on the strong westerly breezes, which prevail from spring until late in the fall. When these cease, the easterly and northerly begin to blow, and continue at intervals until spring. When the wind is north-easterly the weather is serene and delightful, and it blows moderately, but when it becomes south-easterly and south-westerly it is squally, often violent, and accompanied with a deluge of rain. As this falls, vegetation revives, grass and oats spring forth, and flowers begin to enamel the fields. Even in the dead of winter they flourish on hills and plains, and during the last it was a singular sight to see the former clothed with the richest verdure and capped twice by resplendent snow. As vegetation thrives, the innumerable bands of cattle fatten, elk, deer, and antelopes quit the low grounds and range freely over the hills, the prairie wolf or kiote gluts himself more luxuriously on sheep and other small animals, and the grisly bear, the greatest terror of the country, has a choice of flesh or vegetables. Esculent fruits of every kind are rare. Scarcely one is to be found at any season, and a few peaches, apples, grapes, oranges from foreign regions, and wild berries, were all I saw. Vegetables for culinary purposes were principally imported: potatoes, Irish and sweet, pumpkins and onions were sold at enormous prices. At twenty cents a pound the former were cheap, and at Marysville, near the upper mines, the latter were

sold for $1.25. These prices were owing mainly to the great majority of persons being employed in the gold mines. A few attempted cultivation, and were quite successful when irrigation was used, but from a want of a proper knowledge of the seasons, and neglecting to seed soon after the rains began, most persons were only partially successful. The farmers had likewise to contend with the swarms of grasshoppers infesting the country, and I heard of one garden, on the straits mentioned, being desolated by these insects within a few hours. They will continue to be destructive to gardens and farms until some method of destroying them is discovered. But they are not useless; they are killed, dried, and eaten by the Indians. Of this fact I was informed by several credible persons, and by one of the overland emigrants, who had found vast quantities in some of their huts. Acorns, and the kernel of a very large pine cone, are said also to be used for food by them.

For more definite remarks on the climate I refer to the following abstract of a register kept strictly by myself. I regret that the register is too large and minute to insert in this journal, but the abstract will serve to give a general knowledge of the climate.

1849	Thermometer	Barometer.	Hygrometer.	Wind.	Rainy days.	General Remarks.
August.						Ship off San Francisco.
Average.	59	30.04	30½	West-	0	The register includes only eight days in California,
Maximum.	63	30.10	34	erly.		or those after she made the coast on the 24th of
Minimum.	55	29.89	26			August. All of them were misty.
September.						
Average.	57½	30.09½	26	20 Sy.	0	In September 20 misty and cloudy days, and 10
Maximum.	67	30.20	34	4 Ny.		fair. Anemometer 3 seconds.
Minimum.	61	29.94	20	6 var.		
October.						Fair eight days. Heavy constant rains on the 10th 22 days misty, cloudy and variable. Anemometer as high as 3 seconds and as low as 14.
Average.	62½	30.06	25½	11 Ny.	1	
Maximum.	73	30.25	32	17 Sy.		
Minimum.	52½	29.85	16	4 var.		

1849	Thermometer	Barometer.	Hygrometer.	Wind.	Rainy days.	General Remarks.
November.						
Average.	54	30.08	24	12 Ny.	10	Ship at Saucelito, 5 miles from city. Six fair days, 14 misty. Anemometer variable from 3 to 10 seconds. Calm sometimes.
Maximum.	65	30.35	30	17 Sy.		
Minimum.	52	29.55	16	16 var.		
December.						Snow fell on the 3d and covered the adjacent mountains. Seven fair days, 25 rainy, misty, and variable. Hail fell on the 14th. Storm on 3 distinct days, thunder and lightning on one. Anemometer 4 seconds during them.
Average.	50½	30.04½	22½	10 Ny.	12	
Maximum.	57	30.30	30	14 Sy.		
Minimum.	40	29.55	16	7 var.		
1850 Jan						Only 5 fair days, 26 misty, cloudy, and rainy. Ship went up to Benicia, 30 miles above St. Francisco, and remained there until after I left her for home. Anem. 3 seconds on the 9th.
Average.	50	30.04½	22½	7 Ny.	15	
Maximum.	62	30.25	27	15 Sy.		
Minimum.	40	29.85	19	9 var.		
February.						No rain fell until the 21st, we then had it for 4 days at intervals. On the 27th snow fell and covered the hills, but melted in a day or two. The Devil's and other mountains remained covered with it for weeks. During a squall the anemometer was 3 seconds, generally was much less.
Average.	48½	30.13¾	22½	8 Ny.	4	
Maximum.	57	30.36	26	26 Sy.		
Minimum.	40	29.55	19	5 var.		
March.						
Average.	56½	30.10½	24½	10 Ny.	8	Rain fell in light showers. Wind squally, but not violent at other times. Anemometer 4 to 14 seconds.
Maximum.	72	30.35	33	11 Sy.		
Minimum.	40	29.75	19	10 var.		
April.						
Average.	56	30.09½	26½	10 W.	3	Rain fell last on the 19th, and in light showers. Eighteen days were fair and pleasant. Highest range of anemometer 4.
Maximum.	71	30.25	34	9 N W		
Minimum.	47	29.95	18	8 S.		

1850	Thermometer	Barometer.	Hygrometer.	Wind.	Rainy days.	General Remarks.
May.						
Average.	61¼	30.01	26¼	9 S W	0	Twenty-five days fair. A halo about the sun on the 10th, slight mist for several days. Anemometer ranged from 4 to 20 seconds.
Maximum.	71	30.14	34	10 NW		
Minimum.	52	29.85	23	12 W.		
June.						
Average.	62	30.00¼	26¼	12 S W	0	Twenty seven days were fair, but a few were slightly misty. Wind moderate. Anemometer not above 4 and as low as 20 seconds.
Maximum.	76	30.19	29	9 W.		
Minimum.	54	29.85	22	9 N W.		

On the first of July I left the ship for the mines, and could not keep the register with regularity, but I will state that the weather was excessively hot at them, and so cold and damp at St. Francisco, that fire was indispensable for comfort. On the 13th, at 8 o'clock, P. M., Fah.'s thermometer stood at 52° in the latter place, and at Long Bar, upon the 4th of July, it stood in the afternoon at 106°. In Marysville, twenty miles below, and at the junction of the Yuba with Feather river, the heat was 112°. This was accompanied by a corresponding dryness of the air and earth, except on the low grounds near the former river.

In making observations on the force of the wind, the Anemometer or ventometer used was one of my own contrivance, caused by the want of any other instrument of the kind during our long passage around Cape Horn. My instrument consists of a wind-mill wheel fixed in the middle of an axle, beneath the back part of which is placed a reel for a silk line thirty feet long. The axle of each turns on pivots, and during the revolutions of the wheel the line is transferred from the reel to the axle. When this has been done the line is restored to its place by means of a wince connected with the axle of the reel, and taken off at the time of experimenting. The above anemometer I found very sensitive to the lightest winds, and it enabled me very accurately to determine their relative force, but for this purpose I used sometimes another instrument formed of a wheel and axle, similar to that of the first one, and having two cog wheels connected with a face like that of a clock, and fixed in front of a

house-like box. The smaller cog wheel has four teeth, the largest sixty-four. This has the hand of the face attached to the outer end of its axle. The hand indicates the number of revolutions of the wind-wheel in any given time, and the precise number may be ascertained by multiplying their number by four, the number of the teeth to the smaller cog wheel affixed to the posterior end of the axle to the above wheel.

As winter approaches, rain falls and vegetation revives, game becomes more abundant, wild ducks and geese flock in vast numbers upon the ponds, inlets, bays, rivers and creeks. Among other birds found at that season, and during the whole year, are snipe, curlews, cranes, bitterns, buzzards, crows, avosets, grebes, pelicans, cormorants, top-knotted partridges, magpies, and sparrows. The chief birds of prey are hawks, the condor, owls, and white headed eagles, which may be seen flying over the Sacramento in quest of prey, or quietly perched on the tops of the adjacent trees. At all seasons an abundance of fish may be procured by hauling a seine in various parts of the bay of St. Francisco. The fish commonly caught are sprats, perch, mullets, eels, trout, crabs, and sturgeons of fine esculent qualities. Well cooked, their flesh is white, tender, and very savory. In some parts excellent salmon are caught plentifully, and when the Californians can turn their attention from the search after gold, to that of their bays and rivers, no doubt can exist that they will yield as many fish as they can consume.

Of the mineral productions of the country my limited opportunities of research will not allow of my speaking at large; and I will merely remark, that besides all attractive gold, it yields iron ore, cinnabar, jasper, carbonate of magnesia, lime and various petrifactions. Near Benicia a yellowish, soft sand stone exists in immense quantities. It is well adapted for buildings, and notwithstanding the high wages of workmen, is now used by them for their foundations. Some miles northward of the town are several sulphur springs. They arise at the foot of Red mountain, are copious, and already resorted to by invalids. In the waters of one of the springs, I found, on analysis, some magnesia, and a large amount of the muriate of soda—besides the sulphur—and sulphuretted hydrogen, which was constantly bubbling up from the bottom.

(To be concluded in our next.)

CLINICAL REPORTS.

Summary of the course of Demonstrative Surgery in the University of Pennsylvania, from October 9th to December 12th.

The lectures given under the above title at the University of Pennsylvania are so designated, in order to distinguish them from the Clinical Instruction furnished at the Pennsylvania Hospital. This course differs from hospital instruction in the patients being usually presented to the student only in the lecture room, whilst the points of pathology, surgical anatomy, &c., connected with the case, are illustrated by preparations and drawings from the Wistar Museum. The title therefore seems sufficiently distinctive. Under the system of practical teaching now pursued by the Faculty, the student has opportunities of seeing not only the severe cases of the wards of an hospital, but also the tumors, operations and lighter cases of ordinary practice. He is therefore amply instructed in practical details; being first engaged for two hours on each Wednesday and Saturday at the Pennsylvania Hospital, and then occupied for two hours more, in witnessing the operations and demonstrations of practical surgery and medicine, within the University building.

The Demonstrative Surgical Lectures are conducted by Dr. Gibson, Professor of Surgery, on Wednesday at 1 o'clock, and by Dr. Wm. E. Horner, Professor of Anatomy, on Saturday, at the same hour; both being aided by Dr. Henry H. Smith, assistant Lecturer on Demonstrative Surgery. In addition to the bi-weekly lectures, the student can also follow the daily treatment of patients in the Dispensary of the Institution, where much of the office business of the physician and surgeon is amply illustrated. A male and female ward, capable of containing the cases of severe operation, together with a well assorted pharmacy, complete the arrangements of the faculty for conducting this part of their instruction. Experience (as tested by the increased attendance of both practitioners and students) has proved that these lectures are a most valuable addition to the former system of clinical instruction, and as the large number of students resorting to the Pennsylva-

nia Hospital during the Winter months, renders it impossible for the class to visit the wards, every addition to their facilities for the observation of disease, must be regarded as possessing increased value.

The surgical demonstrations being those which are especially adapted to this kind of teaching, we have collected, as illustrative of the general character of the course, a condensed statement of the more important cases shown since the opening of the session of 1850—51.

Oct. 9th, 1850. Dr. Gibson commenced the lectures by some introductory remarks on the plan at present pursued by the medical faculty in reference to practical instruction; alluding to his having first originated it many years since, when, owing to the defects of the alms-house hospital, it became necessary for him to add to the clinical instruction of his class. Since then, the more perfect arrangements of that hospital had rendered his system unnecessary until within the last five years, when similar circumstances had again required its renewal. As it had been now well tested, he thought that its value might be considered as established, not as presenting a substitute for hospital instruction, for on that the faculty had always insisted and materially contributed to, in the hospital course, but as affording the class additional means for the practical study of surgery, and especially of such cases as they would first meet with in practice, yet seldom see in a hospital.

Amputation of the Leg.

After these remarks, and an explanation of the arrangements of the dispensary, &c., Dr. Smith brought forward a patient who had labored for fifteen months under necrosis, &c., of the tibia, from a compound fracture of the leg, caused by being run over by a rail road car, and who was now being exhausted by hectic. The Dr. therefore amputated the leg below the knee, the patient being so well etherised, as to be perfectly unconscious of pain throughout the operation, and having a smile on his face during the dressing. The Anæsthetic agent now, and for some time, employed in the University, consists of four parts of washed Ether to one of Chloroform, the latter being found to prevent the muscular excitement occasionally seen, where ether alone is employed, whilst the extreme sedation of the chloroform is obviated

by the ether. The stump being subsequently dressed with the cold water dressing, did well.

Amputation of Half of the Lower Jaw.

On the 16th, Dr. Gibson presented to the class a patient suffering from a large osteo-sarcoma of the lower maxilla, for which he performed amputation of one half of the bone, disarticulating and removing it without ligating any vessel of importance. This patient was also etherized, but not perfectly, lest the escape of blood into his throat should cause strangulation. Six weeks subsequently the man was again shown, laboring under a salivary fistula, and with evident signs of a renewal of the disease.

Dislocation of the Elbow, reduced after six weeks.

On the 19th, Dr. Horner presented a girl who had been laboring for several weeks under a dislocation of both bones of the forearm, backwards, at the elbow. This patient being etherized whilst the pullies were in action, and their power thus applied without resistance, was soon relieved of the deformity; after which an angular splint was employed, the angle being changed occasionally so as to prevent stiffness of the joint. The Doctor also removed a toe-nail without the patient's being at all conscious of it. The extreme pain attending this operation, as formerly practiced, illustrated fully the benefits of etherisation. In removing the nail, the operator explained the advantages derived from freeing it from the matrix, and removing it entire, instead of the usual operation of eversion after an incision through its middle; which, although it removed the cause of the disease at the time, yet left the patient exposed to the growth of a new nail. This mode has also been lately advocated by a surgeon in Tours.

Removal of the Parotid Gland.

On the 26th, Dr. Horner operated for the removal of the parotid gland in a gentleman from the South, assisted by Drs. Smith, J. Neill, and J. H. B. McClellan. This patient had been laboring under a carcinoma of the gland for more than a year; and the tumor was now about the size of the hand loosely closed, but not yet softened. Though perfectly aware of the risk of a return of the disease, Mr. O'B. preferred the chances of recovery, to the endurance of the violent neuralgic pains caused by the pressure of the tumor upon the nerves of the face. After the application of the anæsthetic, the Doctor made a crucial in-

cision over the tumor, the lines of incision being freely continued along the base of the jaw, and also down the neck in the course of the carotid artery. On turning back the flaps, the tumor was found to be firmly bound down by fibres of the platysma-myodes muscle, and fascia of the neck. After dividing these freely, the dissection was commenced from behind, the tumor having contracted firm adhesions to the anterior edge of the sterno-cleido-mastoid muscle. By working carefully forwards, the gland, which was surrounded by a firm capsule formed by the effects of the inflammation upon the cellular substance around it, was gradually freed from its posterior and inferior attachments, when the primitive carotid being brought fairly into view, was found to have been so much involved in the disease as to show very considerable thickening of its coats, giving it the form and distended appearance of the vessel when injected in the subject. To guard against sudden hemorrhage, a ligature was therefore passed around the artery on a level with the larynx, but not tied. The dissection being again resumed, the upper and anterior attachments of the tumor were divided, and the primitive carotid being tied, the tumor was removed from its deep attachments. These were, here, not so deep as in the healthy condition, the adhesion of the tumor to the angle of the jaw having favored its exit from the deepest points. The division of the internal maxillary having caused considerable recurrent hemorrhage, the internal and external carotids were also tied, lest in their patulous condition, recurrent hemorrhage should ensue through them also. The submaxillary gland being evidently involved in the disease, it was removed, as well as a chain of diseased lymphatics leading towards and adhering to the thyroid on the same side. The wound now made was a perfect gap, and exposed freely all the deep parts of this region; but, on a close examination of the neck, it was impossible to find either the internal jugular vein or the *par vagum* of this side, the probability being that the pressure caused by the binding down of the tumor by the fascia, &c., had caused their disappearance. The operation lasted fifty-five minutes, during most of which the patient inhaled the anæsthetic, although he was not fully etherised during the entire operation. The wound was then filled with lint, and the flaps loosely confined by sutures. On the *eighth* day all the ligatures had separated spontaneously,

and a long thin slough showed all that remained of the upper portion of the carotid on this side. About six weeks afterwards the wound had filled up considerably, but was not allowed to close, a surface of three inches by one and a half or two inches, being purposely kept open in the hopes of doing good by the suppuration. The patient then started for home, in charge of his medical attendant, who was requested to dress the part with acetic acid, in order, if possible, to destroy any diseased growth that might appear.

Resection of the Femur for Deformed Fracture.

Nov. 2d. Dr. Horner brought forward a man, from Schuylkill county, who had received a fracture of his femur, eighteen months previous, but which had been allowed to unite with great deformity, the bone being bent angularly on the outer side of the thigh, and the limb shortened to the extent of four inches.

Having etherised the patient very thoroughly, Dr., Horner assisted by Drs. Smith, Neill, and Chas. Evans, made an incision on the outside and back of the thigh, so as to avoid the blood-vessels, and give vent to any subsequent suppuration, and then sawed off the two oblique ends so as to make the fracture transverse. The pullies being now applied, in order to overcome the shortening, powerful extension was made, and the fragments slipped past each other, so as to bring the limb straight, and elongate it to within half an inch of its proper length. The two fresh surfaces of bone being thus brought in contact, Physick's long splints were applied, together with circular splints around the seat of fracture, and the patient was put to bed. For 36 hours he did well, but mortification of the limb quickly showing itself, he became typhoid, and, notwithstanding the most active treatment, sank rapidly, and died four days after the operation. From its being impossible to obtain an autopsy, the cause of death could not be positively determined, but the impression was, that the mortification resulted from phlebitis, caused either by some injury to the veins, during the extension, or from their compression against the callus surrounding the fracture. A careful external examination showed that the femoral vein was thickened, or filled with a clot, as far up as the external iliac, whilst the limb, from the knee to the iliac region of the same side, was emphysematous and mottled. Pressure in the groin forced gas

out of the wound, from which there also issued a considerable amount of dark grumous blood, which possibly had resulted from hæmorrhage beneath the fascia femoris, but which did not show itself externally, in consequence of the splint closing the wound.

Exostosis of Nasal Bones.

On Nov. 9th Dr. Horner removed an exostosis as large as a large chesnut from the nasal bones of a man, but the patient was unable to give any history of its origin.

Abscess in the Cancellated Structure of the Tibia.

He also presented a patient with an enlargement of the tibia, at its lower third, of about three months duration, the result of a blow. Believing it to be a case of osteitis, and that the excruciating pain was due to an abscess in the cancellated structure of the tibia, the Doctor laid bare the bone, and perforating it with a trephine, so as to expose the structure near the medullary cavity, obtained nearly a half ounce of pure and apparently healthy pus, thus verifying most satisfactorily the diagnosis. The patient was quickly relieved, and in about ten days returned to his home.

Extirpation of the Left Testicle.

On the 16th, a patient, laboring under a fungus of the left testicle, was presented by Dr. Horner, and the history of the case fully detailed. After the administration of the anæsthetic, the testicle was removed in the usual manner, the arteries of the cord being separated from the vas deferens, before the application of the ligature, or the division of the cord. The wound being then united by sutures, was subsequently dressed with cold water, and did well.

Amputation of the Mammary Gland.

A case of well marked scirrhus of the breast, unaccompanied by axillary disease or ulceration, was brought forward, on the 23d of November, by Dr. Smith. After detailing the history and peculiarities of the case, the Doctor etherised the patient and removed the entire gland, without the woman's exhibiting any consciousness of suffering. After completing the dressing, allusion was made, by Doctor Smith, to a point of practice suggested to him by Dr. Horner, viz.: the importance of avoiding, if possible, any removal of the fascia, or sheath of the pectoral muscle; it having been proved in several cases, that its injury impaired the

free motion of the arm, especially in such movements as put the pectoralis major upon the stretch. Two weeks subsequently, this patient was again exhibited, improved in health, and with the wound rapidly cicatrizing.

Fungus of the Dura Mater.

On Nov. 27th, Dr. Gibson presented a boy, æt. 13 years, who had upon the left half of the os frontis, near the left frontal protuberance, a small tumor about the size of a horse-chesnut, or buck-eye. This tumor was elastic, partially moveable, and in most respects similar in appearance to the ordinary atheromatous encysted tumor. It was said to have existed from childhood, and for several years was quite small, but within the last nine months it had rapidly increased. A close examination proved it, however, to be something of a more serious character than was at first supposed, as gentle pressure caused its partial disappearance, although it did not produce any cerebral symptoms, whilst an opening with a sharp well defined edge, could be distinctly felt in the os frontis, by an accurate and experienced finger. Having therefore little doubt as to its being a fungus of the dura mater, the Doctor cautioned the class in regard to a mistake in the diagnosis of such tumors, and the extreme danger that would result should an operation be attempted.

A similar tumor, but of much larger size, was presented at the Dispensary, during the summer, by Dr. Horner. This, on being tested with a needle, bled freely, and was immediately closed,—but the patient has since been lost sight of. The importance and rare character of these tumors therefore induce the publication of this record of them.

Dislocation of the Lens and Staphyloma.

A child suffering from this injury, and also one of Hare Lip, were presented and operated on by Dr. Horner, on Nov. 30th, after which a suspicious tumor was removed from the arm of an old lady, who had been suffering for eighteen months, under a disease believed, by Dr. Smith, to be that of moluscum.

Artificial Limbs.

After some remarks by Dr. Horner on Coxalgia, in connection with an acute case shown Dec. 7th, Dr. Smith exhibited the patient whose leg he had amputated October 9th, and explained the advantages to be derived from artificial limbs, both in the

upper and lower extremities. Those shown seemed to be well adapted to the purpose, and the mechanism of a hand was especially good, it enabling the patient under favorable circumstances to grasp a hat, whip, &c. After referring to the importance of attention, on the part of the surgeon, to the prevention of ulceration of the stump, as well as to the length, when it is proposed to apply an artificial limb, he mentioned that those then shown were made by Messrs. Kretchmar & Gildea, No. 64 Dock street, and had several points to recommend them. He also exhibited a well marked case of Rickets, in which the limbs had been very much straightened by the use of Rohrer's splints.

A case of umbilical hernia and one of fistula lachrymalis were also exhibited by Dr. Horner.

In addition to the above summary of cases, many other patients, suffering under interesting surgical complaints, have been shown at various times, and the peculiarities of their complaints thoroughly explained by the lectures. The general character of these remarks, together with such other points of future cases as may possess general interest, will be hereafter reported somewhat more in detail.

Clinic of the Jefferson Medical College. Service of PROFS. MÜTTER and PANCOAST.

Report furnished by C. W. HORNOR, M. D., Senior Clerk of the Surgical Department.

Cases treated from September 1st to December 21st.

Whole number of cases,	-	-	-	906
" " operations,	-	-	-	120

Viz., Lithotomy, 1; Amputation, 7, (viz., leg, 1, fingers, 4, Toes, 2;) necrosis, 4, (viz., femur, 1, arm, 1, foot, 2;) trephining Cranium for epilepsy resulting from depressed fracture, 1; Castration, 3; resection of femur for ankylosis, 2; screw applied for false ankylosis, 2, in one of which the hamstring tendons were divided; introduction of seton for pseudarthrosis of humerus, 1; extensive plastic operations for malignant ulcer of face, 3; do. for mercurial ulceration of cheek, 2; do. for burn of arm, 1; removal of fungoid tumour of Scalp (very large,) 1; reduction of luxated humerus, 2, one of seven weeks standing; for

stricture of œsophagus, 2; trephining for serocystic tumor of lower jaw, 1; contraction of tendon of pectineus muscle treated by subcutaneous section, 1; extirpation of the eye, 1; cataract, 2; tumours, 19, (viz., arm, 2, brow, 1, cheek, 2, face, 1; cancer of lips, 2, back, 1, sarcomatous of epigastrium, 1, condylomatous, 2, epithelial of tongue, 1, cancroid of ear, 1, epithelial of face, 1, fatty in groin, (very large,) 1, epulis, 1, erectile of lip, 1, steatomatous on nose, 1, fibrous on the neck, 1;) removal of foreign bodies, (glass from hand, 1, slug from thigh, 1, shot from hand 3,) distichiasis, 1; strabismus, 4; abscess, 8, (viz., over sternum 2; head, 1; groin, 1; face, 1; cheek, 1; psoas, 1;) paronychia, 4; pterygium, 3; excision of tonsils, 3; ganglion on wrist, 3; removal of cartilage in knee joint, 1; staphyloma corneæ, 2; fistula lachrymalis, 4; do. in ano, 3; do. in urethra, 1; hydrocele, 3; hare lip single and double, 2; scirrhous mamma, 1; stricture of urethra, 1; evacuation of humors of eye, 1; cicatrix of hand treated by subcutaneous section of tendons, 1; exostosis of tibia, 1; fissure of tongue, 1; injection of eustachian tube, 1; introduction of seton in scrotum for hydrocele, 1; aneurism by anastomosis, 2, one embracing one half of head and extending into the roof of the mouth; varicocele 3; polypus of nose, 3; onychia, 1.

In addition, the apparatus for club foot, spinal disease, and trusses for hernia, were applied in several cases.

Days of operating 32; average number of patients each day, 28.

Clinic of October 23d, 1850.

Cases presented.—Varicose veins of leg; Caries of sternum; Ulcer of breast; Hemorrhoids; Spina bifida; Coxalgia; Scrofulosis; Tertiary syphilis; Ulcer of leg; Fistula lachrymalis; Neuralgia of eye; Cancer of cheek; Rupture of biceps fascia; Conjunctivitis simplex; Granular conjunctivitis; Paronychia; Oblique hernia; Acute osteitis of carpal bones; Abscess of neck; Contusion of spine; Tumor of thigh; Chronic conjunctivitis; Ankylosis of knee; Necrosis of femur; Caries of spine; Elephantiasis of leg; Psorophthalmia; Rheumatic inflammation of the eye; Epilepsy from depressed fracture; Cancer of lip—operation; True ankylosis of knee.* Total, 32.

* The names of the patients were given, but have been omitted for want of room.—Eds.

Several of these cases were exhibited before the class and prescribed for or operated upon; after which Prof. Mütter read the case of John Mahony, performed the operation of "resection," proposed by Dr. J. R. Barton, and concluded with some remarks on "ankylosis."

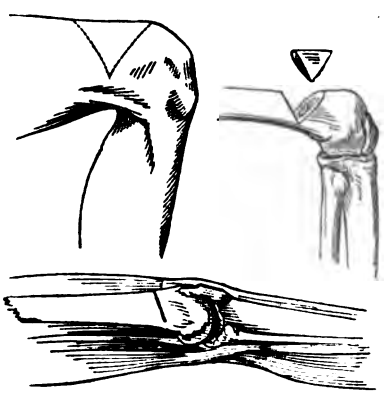
Case 32. *True ankylosis of the knee, following acute inflammation of the joint.*—The patient, John Mahony, æt. 31, a robust sailor, was taken on the 6th day of January, 1849, without any apparent cause, with an acute pain in the right knee. The inflammation which followed soon disabled him, and he was obliged in consequence to apply at the Boston Marine Hospital for surgical assistance. Notwithstanding judicious treatment, suppuration in and about the joint supervened, and to evacuate the pus the joint was twice opened. After remaining in the hospital seven months and a half, during the whole of which period the knee continued to discharge copiously, he left the institution with the leg flexed at nearly a right angle, and with no motion in the affected joint. It appears that he next entered the alms house, and from this institution, after a month or two, he passed into the hospital on Quarantine Island. Thus it would seem that several months elapsed between the development of the attack and its termination in complete ankylosis. When he presented himself at the Jefferson College clinic in April, 1850, no trace of inflammatory action remained. The integuments exhibited here and there a cicatrix, but were otherwise healthy, while not the slightest motion could be effected in the knee-joint. The general health and spirits of the patient were excellent, and he earnestly besought us to attempt some operation for the relief of his deformity, a deformity utterly incapacitating him for duty in his vocation. Fearing the effect of long confinement, in warm weather, he was advised to return again in the fall, when something would be attempted for him. Accordingly he made his appearance in October, 1850, and on the 23d inst., in the presence of several medical gentlemen and the class, the operation was performed by Prof. Mütter, aided by Prof. Pancoast and Drs. Goddard and Wallace. The appearance of the limb is well shown in the annexed cut. The measure selected was that proposed by

Dr. J. R. Barton, and the various steps of the operation may be grouped together under five heads.

Fig. 1.

1. *Incision of the integuments.*—In this, the direction of Dr. Barton was carried out. Two incisions were made over the

Fig. 2.



femur, just above the patella. The first commenced at a point opposite the upper and anterior margin of the *inner* condyle of the femur and passing obliquely across the front of the thigh, terminated on the outer side just below the centre of the limb. The second incision commenced also on the inner side, about two inches and a half above the first; and passing likewise obliquely across the thigh, terminated with the other in an acute angle. (See fig. 2.) By these incisions were divided the integuments, the tendon of the extensor muscle of the leg, at its insertion into the upper part of the patella, and some of the contiguous fibres of the rectus crureus muscle themselves, a greater part of the rectus internus, and a portion of the rectus externus muscles. A flap composed of these tissues was thus raised from the femur close to the condyles. The soft parts were next detached from the bone, so as to admit of the use of a saw. Attention was then directed to the hemorrhage, (comparatively slight,) and, this arrested, the second step of the operation was executed.

2. *Sawing the Bone.*—This is the most important step in the whole operation, for if we commit an error in calculation, a successful result cannot be anticipated. Dr. Barton has well explained that the *wedge shape* is the only one proper to be given to the piece of bone removed, and again, that the *angle* of section must be neither too *acute*, nor too *obtuse*. If *too acute*, the cut surfaces would reach each other before the limb is sufficiently extended; if *too obtuse*, the leg would bear full extension without entirely closing the gap, and hence reunion might be prevented. To determine the *angle* then is a matter of great consequence and to do this the plan proposed by Dr. Goddard is the best, viz.: *Take the angle of deformity, and then remove from the bone the complement of this angle.* Having determined this point, previously, the flap was held out of the way, and a triangular piece of bone, of the proper size, (see fig. 2,) removed by means of a small narrow-bladed saw. The incisions did not extend through the bone, but united within a few lines of its posterior portion, leaving this to be separated in another manner.

3. *Breaking the bone.*—The solution of continuity was rendered complete by simply bending the leg backward, the thin portion of bone breaking without difficulty. This, the third step in the operation, is important, and was introduced by Dr. Barton to

protect the popliteal artery from the danger of being wounded by the saw, and also to steady the fragments of the divided bone by the interlocking of the fractured surfaces. Without this interlocking, the artery would be much endangered by the *sharp ends* of the divided bone coming in contact with it during the subsequent attempts to straighten the limb.

4. *The dressing.*—The flap was next adjusted, maintained in place by suture and strap, and the cold water dressing applied, the limb being carefully held at its original angle of deformity.

5. *Application of splint.*—Dr. Barton used a double-inclined plane, upon which the limb was placed, during the subsequent treatment, but Dr. Mütter employed a screw of Stromeyer's, modified slightly, for the reason that the extension of the limb could be made with more rapidity, and also because it allows the ham to be entirely free from pressure (a most important point) during the whole treatment. In this splint the limb was placed at the *angle of deformity*, no extension being made for fear of forcing the rough ends of the bone into the ham, the patient put to bed lying on his back, and a strict antiphlogistic treatment ordered, with anodynes in case of pain.

On the tenth day, the screw was turned and extension of the leg commenced. Extension was postponed to this period in order that the asperities of the fragments might be removed, or at least embedded in plasma, and thus occasion no inconvenience or hazard in the future treatment. Each day the extension was increased, by simply turning the screw a few threads, and at the expiration of six weeks the leg was found perfectly straight, the cut surfaces united (see fig. 2) and shortened about a quarter of an inch, just sufficient to give the heel the proper elevation for convenient use. During the entire period of treatment not a bad symptom was manifested, the patient having experienced little or no pain, and the wound uniting by *first intention*, with the exception of the acute angle of the flap, which ulcerated.

Fourteen weeks have elapsed since the day of operation, and the union is firm and perfect, the limb presenting the appearance shown in the annexed cut. (Fig. 3.)

Fig. 3.

Remarks.—The term *ankylosis** is derived from the Greek word, signifying *bent* or *crooked*, and is employed to designate that condition of a joint in which its motions, both active and passive, are either partially or entirely destroyed, accompanying which loss there is usually a change in the natural shape of the part. It must be borne in mind, however, that often in ankylosis there is little or no alteration of the shape of the joint involved; it is neither *bent* nor *crooked*, as the etymology of the term would indicate. The beautiful specimens of ankylosed hip, elbow, and knee joints, contained in my collection, and to which your attention has already been directed on another occasion, prove this fact. As the stiffness may involve *one* joint or *several*; may depend on different conditions of the constituents of the part,

* Ankylosis, or anchylosis, ἡ ἀγκυλωσις, (ἀγκύλη, a bending, flexure, more properly the bend of the elbow, the ham, a contracted joint, "contractos articulos ἀγκυλας, Græci nominant." Cels. v. 28.) Stiffness, rigidity, and adhesion of a joint, distortion.

and may also be either *simple* or *compound*, *partial* or *complete*; surgeons have divided this deformity into several kinds.

By *simple* ankylosis we mean that variety in which the joint involved assumes a position and appearance as nearly natural as possible; when, on the other hand, dislocation, either partial or complete, of the articulating surfaces accompanies the stiffness, or the limb is distorted, the case is *compound* or *complicated.*

When the stiffness is confined to but one articulation, and is dependent, as it usually is, on the influence of some local cause, the ankylosis is termed *partial* or *local.* When all, or nearly all the joints are involved, as in the cases of Baron Percy, Bernard Connor, and others, reported in the different surgical works, and the defect is the result of an internal or constitutional cause, it is called *general* or *universal* ankylosis.

Another division of ankylosis is based upon the degree of motion preserved, and the character of the tissue in which the resistance to motion resides. Thus when all motion is lost, and the articular facets are united by bone, cartilage, or dense fibrous tissue, we have a case of *true* or *complete* ankylosis. Mayo has divided this form of the disease into the *osseous*, *cartilaginous* and *mixed*, inasmuch as either *bone* or *cartilage*, or *both* together may form the uniting medium.

When stiffness is dependent upon some defect of the soft parts of the joint, either *extra capsular* or *intra-capsular*, or of the *capsule* itself, and the joint is susceptible of slight motion at the time our examination is made, or if this be absent, capable of being rendered moveable by proper subsequent management, the ankylosis is *false, or incomplete.* Again, these false ankyloses may be divided into the *extra-capsular*, *intra-capsular*, and *capsular*, and this division, so far as prognosis is concerned, is one of much importance. In the first, the tissues surrounding the joints, viz., integuments, cellular tissue, muscles, tendons, and fascia, are involved, and the case is generally susceptible of cure. In the second and third, the rigidity is occasioned by some lesion of the ligaments or synovial membrane, and, although curable if taken in time, is excessively prone to terminate in incurable, or true ankylosis, by involving the cartilages, or bones, or both, in the disease.

It must be obvious that the defect under consideration cannot, with strict propriety, be considered a disease; it is rather a product or termination of morbid action, and often, on this account, its occurrence proves one of the most certain indications of a cessation of disease. True ankylosis is indeed often the only favorable result in certain affections of the joints, and we consider the case as cured, when, by our remedies, we are able to bring about this occurrence.

Before undertaking to relieve stiff joint, therefore, we must carefully investigate its causes, and ascertain whether or not it is proper to attempt a cure of the deformity to which it often gives rise.

Causes.—The causes which operate in the production of ankylosis are numerous, and most of them occasion the complaint by keeping the parts involved motionless, or nearly so, for a length of time, or by the development of inflammation. There are some, however, that seem to exert their influence under all circumstances; for example, old age, chronic rheumatism, and chronic gout. It is true the joints usually involved from the operation of any one of these causes, are those possessing comparatively but little motion, as those of the spine, pelvis, and some of the ginglimoidal; and the individuals themselves are forced to lead very sedentary lives, which will of course favor the occurrence of stiffness.

True ankylosis is also occasionally developed in the effort which nature makes to protect herself from harm in certain curvatures of the spinal column. This beautiful provision is well shown in several specimens in my collection, taken from individuals affected with the complaint. Ledges of bone are thrown into the hollow of the different curves, so that the spinal column is supported, and prevented from yielding so far as to endanger life.

True ankylosis is, however, most generally the result of some disease of the synovial membranes, cartilages, or bones of a joint, although it may result from long confinement to one position, as has been clearly shown by Malgaigne, Tessier, and others. It is commonly believed that the ankylosis resulting from long confinement of a joint to one position, as in the treatment of fractures of the extremities, belongs to the class of incomplete

or false; and this, to a certain extent, is true, but we often have produced instead, complete and incurable stiffness. This fact adds another to the long list of objections to the use of immoveable apparatus, in the treatment of fractures.

False ankylosis, especially the extra-capsular form, is developed by causes somewhat similar, although they produce lesions by no means so grave as those which are present in the true. The most common of all these causes is rest. When a joint, even although perfectly healthy, is confined to one position for any length of time, we find its integuments, and the cellular tissue beneath them, contract, and become more or less rigid; its ligaments and tendons also stiffen, and the muscles to which they are attached shorten where the limb is flexed, and lengthen where it is extended, and often undergo changes in their tissue, by which they lose their physical characteristics, and are rendered, to a certain extent, useless, while the synovial secretion is arrested or diminished. A good illustration of the influence of rest upon the joints, is afforded by the stiffened limbs of the Fakirs of India, who, actuated by religious motives, condemn themselves to the observance of one position during their whole lives. The same thing is often seen after the treatment of fractures, luxations, or sprains, when the limb has been maintained in one position for too long a period.

Wounds followed by sloughing of the skin, burns, &c.; in short, any injury likely to be followed by extensive cicatrization, may lay the foundation of extra-capsular ankylosis. You all know the power with which one of these cicatrices forms, often destroying or displacing some of the most important parts of the body. Here is a hand, the fingers of which nearly touch the back of the forearm, in consequence of a burn. This drawing you recollect as the one taken from a patient whose chin was drawn down to the sternum, by the cicatrix of a burn, and held there for twenty-seven years. Such cases can only be relieved by very extensive plastic operations.

Extra-capsular ankylosis is also sometimes brought on by the development of an ulcer, or an abscess, or a phlebitis, or an angioleucitis, the result of some trivial wound or blow received upon the part. The complaint being generally confined to one side of the limb, there is contraction in this direction, produced

partly by the patient's flexing the limb to take off pressure from the inflamed surface, and partly by the swelling itself, displacing the tendons and fascia in the neighborhood. By and by lymph is deposited, and unless the disease is cured, there remains permanent contraction of the limb, with motion in but one direction. This form is readily distinguished from that dependent upon shortening of the muscles, by the following experiment. If we take hold of the limb farthest removed from the body, and steady the one to which it is attached, and then attempt to separate them, or bring the member to its proper shape, we find in this form of ankylosis that the soft parts, although rigid and unyielding, are yet smooth and even upon the surface. Now, when the tendons or muscles are chiefly in fault, and the same experiment is tried, we find them standing out in bold relief, as hard and as rigid as pieces of wire, while the soft parts in the vicinity are comparatively loose and yielding.

Different affections of the tendons or muscles, in the vicinity of a joint, may also cause extra-capsular ankylosis. A man, for example, receives a slight wound of a tendon or muscle, irritation or even inflammation of the part sets in, and the joint contracts by a shortening of the muscle alone. Sometimes the same cause may excite adhesions between the tendon and its sheath, or may even cause a sloughing of the same part.

Sometimes this form of ankylosis is dependent on a constitutional cause, as rheumatism or gout. Often, too, a loss of muscular power, either by sloughing, or wounds, or paralysis on one side of the joint, by destroying, as it does, the balance of power which naturally exists, will bring on this form of ankylosis.

The sound muscles being no longer opposed by their antagonists, pull the limb into an unnatural position; and as there is no power to overcome this influence, they keep it contracted, and gradually accommodate themselves in length to the altered condition of the parts, so that when we attempt to straighten the member we find it impossible to do so, until by stretching or division with the knife, the shortened muscles are made to yield.

In certain forms of club foot, torticollis, contraction of the fingers and toes, &c., this kind of ankylosis is encountered. In cases of long standing, we invariably find the muscles and ten-

dons of the weak side stretched and frayed out, and so much weakened that months and even years may elapse before they regain their natural tone and vigor.

This should always be explained to the patient, who will be obliged to make use of artificial support for some time after the member has been restored to its natural shape.

Extra-capsular ankylosis is also the result of contraction of fasciæ, as we see in certain forms of contracted elbow, knee, and hands. It may also proceed from the growth of tumors, and the deposit of bone around the joint.

Capsular ankylosis.—This form is generally the result of a severe strain or twist of the joint, in consequence of which the capsular ligament is more or less injured; a luxation or fracture near the joint, gout, rheumatism, wounds, and even rest may occasion the same thing. It is extremely difficult to distinguish this variety of ankylosis from the *intra-capsular;* but usually in the latter, the cause operating is more violent, the stiffness is accompanied with more pain, and it is more difficult to move the joint. When a capsular ankylosis is examined by dissection, we find the fibrous tissue of the capsule thickened and hardened, and sometimes converted here and there into cartilage or bone.

Intra-capsular ankylosis is the result of some disease of the synovial membrane, usually acute or chronic inflammation, or their results; but the peculiar degeneration of this tissue, so well described by Sir Benjamin Brodie, may also lay the foundation of the complaint. The bond of union here, is nothing more than organized coagulable lymph, which sometimes stretches across the joint from bone to bone, in bands, or cords; at others it is deposited in patches, and, in a few rare instances, has been found spread over nearly the whole of the articulating surfaces of the joint, thus glueing the bones, as it were to each other.

The history of the case will generally enable us to decide as to the precise nature of the bond of union; but it should always be borne in mind that synovitis may lay the foundation of capsular, or even extra-capsular ankylosis, producing, as it often does, subinflammation of the cellular and fibrous tissues about the joint, and also the peculiar contraction of the muscles and tendons usually met with in diseases of the articulation.

It also frequently gives rise to true ankylosis—the disease extending to the cartilage and bones. The extreme rigidity of the joint, the apparent soundness of the tissues around it, the swelling which in the first stage of the disease, is usually present, the pain excited by moving the articulation, or pushing one bone against another, the character of the cause, and the fact that such cases are usually preceded by all the symptoms of inflammation of the synovial membranes, all serve to indicate to us the variety of the affection.

Morbid Anatomy.—From the explanation already given of the different varieties of ankylosis, the appearances on dissection may be readily imagined. But there sometimes exist certain effects to which reference has not yet been made. When resulting from inflammation we find all the products of this lesion manifested in one or more of the tissues. We may have, for example, simple *thickening* of the soft tissues, with *muscular contraction and adhesion* from effusion of plasma both within and without the articulation; deposits of calcareous matter in these bands of plasma, constituting the *intermediate ankylosis* (*l'anchylose par intermède,*) of some authors; destruction of cartilage, and *fusion* of the bones ("*l'anchylose par fusion,*") and again when the osseous deposite is abundant we have often a kind of socket formed on the outside of the joint into which one of the bones is received, and which has been described by Cruveilhier as *l'anchylose par invagination.* With these changes in the constituents of the joint, we have often subluxation and distortion and wasting of muscles. When *rest* is the cause of ankylosis, we have less alteration of the bony tissue of the joint, although here as under other circumstances, attrition of cartilages and fusion of bones may take place. The soft tissues, however, are always atrophied, and the muscles have been known in cases of long standing to undergo the *adipose transformation.* This is a rare result, but I have seen it in several instances.

Liability.—It is usually stated that the ginglimoid articulations are more liable than the orbicular to both true and false ankylosis; and the observation is correct, owing chiefly to the circumstance that the former are more exposed to accidents.

Their large articulating surfaces, and the number of tendons

and fascia by which they are surrounded, also predispose to the occurrence of the disease.

Diagnosis.—There is scarcely any difficulty in distinguishing the different varieties of ankylosis from other complaints, but it often demands a great deal of tact to distinguish them from each other. False ankylosis, for example, may exist, and yet the joint be as immovable as in the true variety; but by careful examination we may generally arrive at a just diagnosis. If, for instance, there is no motion in the joint, when it is twisted or turned with great force, if these efforts excite no pain, if the stiffness has been preceded by extensive intra-capsular disease, if the joint is comparatively but little swollen, if the patient feels a jarring when the limb is struck, or when he takes a false step, if it be in the leg, if he dreads these shocks, and finally, if, when we attempt either to bend or straighten the limb, the muscles and tendons about it are scarcely moved, we may pretty safely conclude that we have a case of true ankylosis to contend with. False ankylosis is also sometimes confounded with a rigid condition of the muscles surrounding a joint, which suffers from some acute or chronic inflammatory disease. A case of this kind was some years since shown me by my friend Dr. Rodman, and it occurred in the son of Mr. B——— of Schuylkill Eighth street. This lad had suffered from coxalgia for some months, and his limb was shortened seven inches, the thigh flexed at a right angle with the pelvis, and no perceptible motion in the hip joint. At first I was under the impression that true ankylosis had taken place, but on a more careful examination it struck me that it might probably be a case of simple false ankylosis from rigid muscles. I therefore applied an apparatus by which moderate and constant extension of the muscles might be kept up, and had the satisfaction to find that in the course of a few days, without pain, fever, or any inconvenience, the limb was reduced to the plane of its fellow, and within one inch of its natural length. The details of this case will be given on another occasion. The fact that this condition of the muscles may give rise to complete immobility, should be constantly borne in mind in an examination of stiffened joints.

In forming a diagnosis between the different kinds of false ankylosis, we must take into consideration the history of the

case. If the rigidity is the result of rest, cicatrices, affections of the sub-cutaneous cellular tissue, spasm of the muscles, slight wounds of the tendons, or injury of the fascia, it is probably extra-capsular. If caused by a spasm, or punctured wound, or a blow, it is capsular, and, finally, if acute or chronic synovitis, or gout, or rheumatism, or slight disease of the cartilages or bones has existed, we shall have the intra-capsular form.

Prognosis.—The prognosis in this affection varies with the character of the lesion, whether it be true or false; and if false, the nature of its cause, the duration of the case, the age and health of the patient, and the joint involved.

The prognosis as regards cure is almost always unfavorable in true ankylosis; and, until very recently,—indeed until the publication on this subject by Dr. J. Rhea Barton, of Philadelphia,—all such cases were ranked among the incurable forms of the affection, and even now the propriety of resorting to the operation of Dr. Barton, must be the result of mature deliberation. Many cases give rise to so little inconvenience as scarcely to warrant the hazard of the remedy; while others, as those that result from caries, or extensive disease of a joint, should not, as a general rule, be touched, inasmuch as ankylosis is the most favorable termination of the complaint; besides which, the operation may excite anew an inflammation in the part sufficiently intense to destroy the patient.

When the stiffness is partial the prognosis is usually more favorable, but even here we sometimes find it impossible to effect a cure. When it is dependent upon extra-capsular lesion, of no very long standing, and there is no loss of tendon or muscle by sloughing, the prognosis is favorable; but if the ankylosis be capsular or intra-capsular, unless the primary disease has been slight, or confined to the ligamentous tissue, as in gout or rheumatism, and the case is of recent occurrence, we shall generally have great difficulty in accomplishing our object.

When the stiffness depends on the location of a tumor, in the vicinity of a joint, the prognosis is generally favorable, inasmuch as we can remove the cause. The younger the person, the greater the probability of a cure in almost all cases, for, as we increase in years, the tissues become more rigid and unyielding. The general health, too, of the patient must be taken into con-

sideration; there are some persons so irritable and prone to inflammation, that the slightest effort towards a cure, made either with the knife or mechanical means alone, is sure to excite disease. We should, therefore, carefully examine the case, and determine, as nearly as possible, the propriety of instituting any treatment before our attempts are commenced. In illustration of the importance of this care, I may mention that several persons have either lost their lives, or been reduced to a very critical position, by the attempts to cure ankylosis by the screw. In my own practice I have been obliged, in two cases, to suspend the treatment, until the general health was so much improved as to justify the attempt to straighten the limb to be renewed. The prognosis is also modified by the joint involved, for we find it much more easy, as a general rule, to cure ankylosis of the orbicular than of the ginglimoidal articulations. The function of the joint is also found to modify the prospects of cure: thus, when the articulations of the maxillary bones are involved, as in the cases of Cruveilhier and others, it will be found impossible, by any operation, to afford relief. In one case, mentioned by Blackburn, the patient died from inanition in consequence of this cause.

(To be concluded in our next.)

University of Pennsylvania,—Demonstrative Medicine.

Reported for the Examiner.

Saturday Morning, Dec. 7th, 1850.

Professor Hodge conducts the Medical Clinics on Wednesday of every week, at 12 o'clock; Prof. Jackson on Saturday, at the same hour. The patients presented on such occasions are selected from those who come to solicit medical advice and assistance from the dispensary department of the University. The choice of Prof. H. is made with special reference to the elucidation of the diseases of children and females,—which are more particularly treated of in his regular course on these subjects; while the remainder, many of them interesting chronic affections of the chest, heart, and internal organs generally, are treated by Prof. Jackson. The assistant to both these gentlemen, Dr. Gerhard, is always present, and aids in the examination and treatment of the cases, as well as in the clinical lectures delivered to the class in the amphitheatre.

The following lecture by Dr. Jackson is all that the crowded

state of our pages will, at present, permit our publishing. The cases are deferred until the next number.

Dr. Jackson's Clinical Lecture.

The Spirometer.

Medical Science finds, in almost every department of knowledge, some portion of its facts or laws applicable to itself, and lays them under contribution for its own advancement, or the augmentation of its resources.

The introduction of physics into the practice of medicine, applied to the diseases of the thoracic organs, belongs to the present time, and is the most valuable improvement that has yet been made in the diagnosis of disease.

Percussion and auscultation are means of ascertaining and interpreting the physical causes of sounds which can be determined by them as belonging to the thorax and its contents.

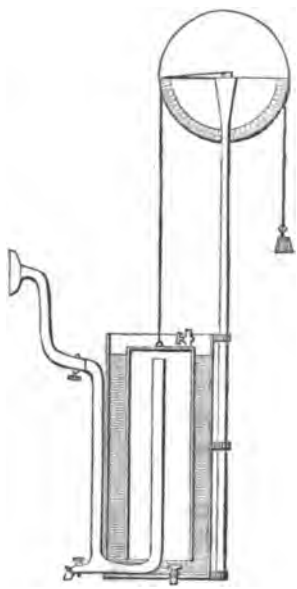
Skill in these processes imparts a degree of certainty to the diagnosis of thoracic affections, that nearly reaches perfection; it almost equals that of ocular inspection. There is, however, this defect attending them; disease must have made some progress, and change of structure have taken place to a certain extent, before physical pathological signs, that is, alteration in the normal sounds, or production of abnormal sounds would be produced. They do not avail us in indicating the approach of disease, or its forming stages, except to a very limited extent.

Another contribution from the domain of physics has been made, by Mr. Hutchinson, to the investigation of the respiratory functions in health and disease. It consists in an instrument he has invented, by which may be measured the amount of air that can be taken into and expelled from the lungs by voluntary effort; or what he calls "the vital capacity" of the lungs. By this instrument Mr. Hutchinson believes that incipient disease may be detected before physical signs exist. This instrument he names spirometer.

On the table is an instrument of the kind. It is simple and less expensive than that of Mr. Hutchinson. It was planned by a gentleman of this city, Mr. Charles McEuen, who has been confined to his room for some months by a pulmonary affection; possessing an active mind, with a turn for philosophical pursuits, he occupies his time in scientific observations and investigations. I

gave him Mr. Hutchinson's paper, published in the Medico-Chirurgical Transactions, containing a diagram of his instrument. Mr. McEuen constructed the instrument now before you on the the same principles. I think it preferable to the original.

The instrument will be seen to consist of a cylinder containing water, in which is immersed another cylinder inverted, into which the expired air finds its way. This cylinder is counterpoised by a weight attached to a cord passing over a wheel of large diameter, and which rotates with the ascent of the cylinder, caused by the entrance of the expired air, and on which a scale indicates the amount that has been introduced.



The person using this instrument must loosen any part of his dress that may restrain the movements of the chest or abdomen. He then deliberately expands his chest to its greatest extent, and expires through the mouth piece and air-tube into the cylinder. As this rises the wheel turns round, and an index marks on the scale, in inches, the amount expired.

To understand the use of this instrument, it is requisite you should possess some preliminary information on the respiratory actions, and to what extent they influence the air in the lungs.

Inspiration and expiration are performed by muscular power, and are both voluntary and involuntary actions. The extent to which they may be carried varies in different individuals, and in the same individual at different times. They have a limit which cannot be surpassed; the lungs can never be emptied, by the most strenuous efforts of expiration.

The air in the lungs is, therefore, divisible into two portions. The first, which is a fixed quantity, is that over which the will has no control, but remains after the strongest expiration, and is contained in healthy lungs after death. Its amount must correspond with the size of the thorax. Mr. Hutchinson calls this the residual air.

The second portion is that which is controlled by the will and muscular action. This portion Mr. Hutchinson divides into three sub-portions. 1st. Reserve air, or that portion which, after an ordinary expiration, may still be thrown out by a voluntary effort. 2d. Breathing air, or the portion inhaled and exhaled in ordinary breathing, when at rest; and 3d. Complemental air, or that portion that can be inhaled, by the strongest effort, beyond the amount of ordinary inspiration.

The three last are included in, and designated by the term "Vital Capacity." It is, in fact, the highest effort of the muscles producing respiration. The spirometer measures the "vital capacity" of an individual, and, it appears to me, is the measure of the muscular respiratory power.

Mr. Hutchinson was struck with the fact, that the vital capacity had no relation to the size of the thorax. On the contrary, he found, by experiment, that persons of the largest thorax possessed a less vital capacity than others with chests much smaller.

In the course of his observations he remarked that there appeared to prevail a very close relation between the height of individuals and their vital capacity. This circumstance was the more strange and unaccountable, as height depends most commonly on the length of the lower extremities, and not on that of the chest or trunk alone.

From observation made on a large number of individuals, taken indiscriminately from various classes of society, amounting to

2150, he arrived at the conclusion, that the vital capacity is a constant quantity, and holds a close relation with the height.

From the result of direct examination, in near 2,000 cases, Mr. Hutchinson felt authorized to announce the following rule, "For every inch of height (from 5 feet to 6 feet) eight additional cubic inches of air, at 60° are given out by a forced expiration."

He further states, "here is a guide for the operator, and a rule given that will enable us to compare men of different stature and conditions of health, one with another."

If this result should be found accurate, the spirometer would be unquestionably a most valuable addition, to aid the physician in deciding the state of health in many cases, that are, by our common mode of examination, enveloped in great uncertainty.

The following table shows the relation between height and vital capacity.

Height.				Total Capacity.
Ft.	In.	Ft.	In.	Cubic Inches.
5	0 to	5	1	174
5	1 "	5	2	182
5	2 "	5	3	190
5	3 "	5	4	198
5	4 "	5	5	206
5	5 "	5	6	214
5	6 "	5	7	222
5	7 "	5	8	230
5	8 "	5	9	238
5	9 "	5	10	246
5	10 "	5	11	254
5	11 "	6	0	262

Before making any further comment on the rule laid down authoritatively by Mr. Hutchinson, I will test by the instrument the vital capacity of some patients affected with pulmonary disease, who are now present.

(Several patients, cases of chronic pleurisy, phthisis pulmonalis in various stages, and emphysema, were tested, the height and age being first ascertained.)

They vary, you perceive, from 80 to 120 cubic inches expired. Not one of the above patients approaches to the normal vital capacity, in accordance with his height and age.

They are from 80 to 200 cubic inches below the standard according to the table.

I must confess, that I have some misgivings as to the accuracy of this rule, and cannot but suspect that another element than that of height regulates the extent of vital capacity, and that element is the muscular force of the respiratory muscles.

I express this only as a suspicion. The extent of Mr. Hutchinson's inquiries, the evident care, labor and conscientiousness with which he pursued his investigations, entitle them to the highest consideration, and they should not be lightly questioned.

But, in a considerable number of examinations I have made on healthy individuals, of the same height and age, with slight difference of weight, there is manifest such wide difference of vital capacity, that I cannot but hesitate in adopting the rule as universally applicable.

I have, for instance, examined, within 24 hours, three gentlemen in perfect health, one a member of our profession, who have all been and are engaged in active pursuits. They are, respectively, 5 feet 11 inches, 5 feet 11½ inches, and 6 feet in height; the vital capacity of the first two is only 170 cubic inches, and of the last 190 cubic inches. According to Mr. Hutchinson's table they ought to have a vital capacity of 250 to 260 cubic inches.

Now, these gentlemen have a peculiar, and I may say, an American conformation. I am under the impression it is not common in England. They are tall, long limbed, thin, with very slender muscles.

The highest vital capacity I have met with, as yet, is in a young gentleman 5 feet 8 inches in height, in whom it is 280 cubic inches. He is of sanguine temperament, large, bony-framed, and with well developed muscles. So far as about 100 observations have been made, I have not found that uniform relation, as stated in the rule, between height and vital capacity. The differences, from 20 to 100 cubic inches, are too great to be attributed to accidental circumstances. The individuals I speak of are all in high health.

More numerous and extended observations are, however, required, before a positive conclusion on this subject can be justified.

It has occurred to me that the discrepancies between Mr. Hutchinson's statements and my own observations, should they be confirmed by more numerous experiments, may depend on

differences of race. The English are far more homogeneous than the Americans. In this country races are mingled, and continue to be more blended every day. As a race the English are bony, muscular, and sinewy. Experiments with the Dynamometer have shown they possess a superiority of muscular force.

In a homogeneous population the average height and weight would be in accordance with an average development of the muscular system. But in a mixed population the same rule would not apply.

I believe there can hardly be a question as to the very marked difference in the general aspect and structure of the native-born Americans, who are generally a mixed race, and those of the English, Germans, Irish, and French.

In examining Mr. Hutchinson's Table *A*, exhibing the total capacity of 15 different classes, there are very striking differences to be seen. Pugilists, seamen, fire and police-men, and grenadier guards, have the greatest vital capacity. This is shown in the column of the table for the height of 5 ft. 8 in. to 5 ft. 9 in., and from 5 ft. 9 in. to 5 ft. 10 in.

Table of the mean Vital Capacity of 15 *different Classes.*

	5 ft. 8 in. to 5 ft. 9 in.	5 ft. 9 in. to 5 ft. 10 in.
Seamen	239	258
Fire Brigade,	231	237
Police, Metrop.,	226	248
Ditto Thames,	250	240
Paupers,	199	262
Mixed Class,	238	246
Grenadier Guards,	233	240
Compositors,	214	231
Pressmen,	245	239
Draymen,	223	245
Gentlemen,	208	236
Pugilists, &c.,	243	273
Chatham Recruits,	251	266
Woolwich Marines,	240	246

In this table the vital capacity certainly does not correspond to height as it respects different classes. Those classes comprehending individuals whose occupations require athletic, robust, and picked men, exhibit a vital capacity varing from 20 to 40 cubic inches higher than paupers, compositors, and gentlemen.

This table appears to sustain the conclusion which seems to follow from the observations I have made here with the Spirometer, that it is muscular power, and not height, that governs the "vital capacity."

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(Continued.)

REPORT ON MEDICAL EDUCATION.

This Report which treats of a subject, which has been regarded by the Association as one of primary importance, in its connection with the existing and future state of medical science in America, covers but seven pages of the Transactions. The copiousness of former reports is considered by the Author as a sufficient reason for omitting a reference to many of the more special subjects which have claimed the attention of previous committees. But, notwithstanding the labors of his predecessors are regarded as so full, as to leave little to be accomplished, the Author of the Report appears to consider that they have left the subject in a mist of obscurity.

"The records of the discussion thus far embrace, as in most cases where practical subjects have been submitted to abstract investigation, a somewhat intricate intermingling of *facts* and *opinions*.

"The *facts* include a statistical history of the schools, professors, students, and graduates; their situation, quantity, kind and means of instruction; preliminary and ultimate requirements, modes of examination, and other important particulars.

"The *opinions* relate chiefly to conclusions thought to be deducible from the *facts*. So far as they have assumed a definite form, they assert, first in general terms, that the system of medical education in this country is defective. Second, that it is so because the number of schools is too great, their situation (in many cases) bad, their instructors too few, their students and graduates too many, the time devoted to instruction

too short, the quantity too limited, the quality too superficial, the bestowal of honours too profuse, and the mode of bestowal too unrestricted; all this involving, inevitably, a depreciation of the profession, and an impairment of the dignity, honour, and usefulness of the healing art."

How far these facts and opinions accord with the Reporter's own views, we are not informed, nor has he attempted to unravel the "somewhat intricate intermingling of facts and opinions" which he has discovered in former reports. To our minds he has, however, deduced sufficient material, from the labors of his predecessors to have formed a text for copious and profitable discussion. How stand the statistics of the schools for the past year? how many new ones have sprung into existence? where are they located, and what their means of giving a thorough medical education? Have the schools made any advance within the year in the means of instruction? Are practical anatomy, practical pharmacy, and clinical teaching, more regarded than in former years? Have the preliminary and ultimate requirements, and the mode of examination been improved or modified in any of the schools? Have any of them increased their number of Professors, lengthened their sessions, or improved the instruction either in quantity or quality? Is the bestowal of their honors more guarded and limited, or have they, or any of them, modified their courses in any essential particulars, and thereby added to "the integrity, honor, and usefulness of the healing art?"

From the Author's admitted appreciation of the labors of his predecessors, one would think that all these questions would have naturally arisen, in following up what they had commenced. Certainly the Association had a right to expect that such information would have been laid before them, by a committee to whom they had entrusted the duty of setting forth the progress which medical education was making within its limits. The Association had issued its recommendations, based upon glaring and increasing deficiencies in the courses of the medical schools, as officially reported to them, it was their right to know how far these recommendations had been heeded, and by what bodies they had been disregarded.

Such schools for instance, as had extended their terms of instruction, or shown a disposition to improve upon former plans, should have been made known, and those which had declined to

follow out the requisitions of the Association, should have been represented in the Report, in their own defence.

Instead of this we have a general acknowledgment of the good will of the schools, which is thus complacently set forth.

"The schools have been disposed to meet the efforts of the Association in a spirit of cordial co-operation. Some of them have attempted to carry into practice its most important recommendations; and almost all have manifested a desire to contribute to the improvement of professional education. In no instance has any one of them, so far as the Committee can learn, assumed a hostile aspect towards the Association or its objects. Whatever reproaches may have been uttered against them for deficieney or delinquency, they have reason to feel proud that their relation to the Association has been, from the first, one of harmony and good will; that they have identified themselves with it, not to thwart or defeat its great designs, but to further their fulfilment; not merely for their own honor and their own interest, but for the advancement of science and the good of their fellow men."

Now this language may lull the indifferent or listless spectator of passing events, into the fond belief, that great things are being done for medical education. Some schools have, we are told, *attempted* to carry into practice the most important recommendations of the Association; and almost all have *manifested a desire* to contribute to the improvement of professional education. Not one has assumed a *hostile aspect* towards the Association or its objects." This is certainly very well, as far as it goes. It is something for the representatives of the great medical community of the Union, to be thought well of by the schools, and not to be openly opposed by any single one of them; but it is far more important that their fruits should manifest a "cordial co-operation" with the objects which the body has at heart, in elevating the standard of medical education, and thereby increasing the usefulness and respectability of the profession.

Upon the several recommendations of the Association, in regard to medical education, the report is not altogether silent. In regard to preliminary education, great deficiency is acknowledged, which "should be equally shared by the profession, the schools, and the students."

The report further remarks:

"The Association has attempted to obviate this difficulty by urging upon the profession and the schools, certain recommendations, which as

yet have not been fully complied with. Neither of the parties most interested seems willing to assume the responsibility. The student dislikes to have his self-complacency offended; the practitioner fears to hazard the good will of the student; and the school, it is feared, is often too anxious, lest the portal of some active rival should be found of easier access than its own. Hence, with the defect generally admitted and deplored, it does not appear that hitherto much has been done towards applying any efficient remedy."

On the subject of lengthening the lecture terms of the schools the Report holds the following language.

"The charge has been somewhat pertinaciously repeated that the student, after entering the schools, is often imperfectly and insufficiently taught; that there are schools badly situated, scantily officered, and meagrely equipped—unable, in short, to fulfil their promise to provide a proper course of public instruction. The Committee are not in possession of the name of any particular school against which, justly or unjustly, this charge has been openly and directly alleged. If there be a single school fairly deserving such an imputation, it is hoped no false compassion will interpose to shield it. After three years of consultation and discussion, it surely cannot be deemed unreasonable that this Association should discriminate between those schools which have its confidence and those which have not.

"Practically, the Association has advised an increase in the number of instructors, and an extension of the period of instruction. It is not known that either of these recommendations has been generally adopted; as to the last, it would seem that the original design of the Association, which, as the Committee apprehend, contemplated a lengthening of the term of lectures without materially increasing their number (on the ground that too many were crowded into too short a time), has been somewhat misunderstood. Since, of late, it has been argued that the *completeness* of a course of lectures necessarily depends upon its duration, and that this is an indisputable advantage of the six over the four months' course. The schools also appear to differ in their understanding of this point; some of them having increased both the term and amount of instruction, while others have extended the former alone. Thus, in the institution selected by the committee of 1849, 'as a model of the schools of our own country, whose rules and requirements are believed to be quite as full and extensive as those of any other institution, and whose trustees and professors seem to be as well disposed as any others to accede to the general wish of the profession, as expressed through this Association, to favour proper measures of reform'—although the lecture term is one of six months, the aggregate amount of instruction, as reported, is really less than in another school whose course continues but four and a half months. The Committee would suggest, therefore, that it should be fairly stated, by those schools in which the session is prolonged, whether there is, or is not, a proportional increase of the amount of instruction."

Is the Professor who penned this section really ignorant of

the facts, which his predecessors have so clearly set forth, in regard to the *general* deficiency of medical schools, to furnish that full and complete course of instruction, which the requirements of the age, and the advancing spirit of medical science demand? Does he not know that the competition amongst the schools has sadly lowered the standard of education, and that fears are entertained that one school admits and passes unqualified persons, "lest, to use his own language, the portal of some active rival should befound of easier access than its own?"

Why cite particular schools in which defective courses are given; in which no adequate clinical instruction is furnished; in which practical anatomy is lightly passed over, and in which a diploma is granted without that full and complete study which is required by the public voice of the whole profession; when the facts and statistics are spread out before the public, so that he "who runs may read"? The duties of the Association are not to single out particular institutions, and to hold them up to invidious distinction; but, to sustain and cherish those which, acknowledging their defects, manifest a determination to improve their means of instruction, and to co-operate with it in the noble work of elevating the standard of education, irrespective of narrow and selfish interests. Instead therefore of pleading for existing abuses, and endeavoring to make it appear that one school can give more instruction in four months and a half, than another can in six months, we would suggest that the efforts of future committees should be directed to sustain the previous action of the Association, and to advance the good cause of progress in which it has embarked.

That there has been just ground for the complaints which have been made by previous committees on this subject, we are fully convinced; and we cannot but regret that after three elaborate and high-toned reports upon it, in which a more elevated ground has been assumed, calculated to incite our medical teachers to high and noble effort in the responsible position which they have assumed, that the paper before us should fall below its predecessors, and should endeavor to palliate those defects and evils which must be candidly exposed and acknowledged before a remedy can be applied.

To show the effect produced upon the minds of our transatlan-

tic brethren, by the revelations of former committees upon this subject, it may not be inappropriate to introduce here a brief notice of the reports upon Medical Education, introduced into a review of our transactions, which appears in the British and Foreign Medico-Chirurgical Review, for Oct., 1850, with the remark, that although something is to be allowed for the ignorance of the profession abroad, in regard to the actual state of medical knowledge in this country, yet there is, in the main, much reason for the strictures contained in the following extract:

Reports of the Committees on Medical Education.—This is properly deemed, by a body of enlightened men, having the elevation of the *status* and increase of the utility of their profession at heart, as the most vitally important subject that can engage attention. We were not prepared for some of the disclosures here made, and certainly feel somewhat more reconciled to the delays which have taken place in the reform of our own institutions, after contemplating the infinitely worse condition of those of our neighbours. We will summarily indicate the chief defects:—1. The Student commencing attendance on lectures is not required to give any proof of preliminary education. 2. The courses of lectures are only of three or four months duration for two years, the various subjects, too, being treated of, not successively, but simultaneously; 3. Medical colleges obtain charters with great ease in the different States, and there are already thirty-eight such institutions, invested with the double power, of teaching and conferring the degree of M.D. A fierce competition prevails among these bodies, and various inducements are held out to students by some of them, such as low prices and long credit, in order to swell the number of their pupils. 4. Not only is the duration of the session ludicrously short, but several subjects are ill-taught, and others not taught at all. Thus, practical chemistry and pharmacy meet with little favor; while in few of the institutions are lectures delivered on botany, or on comparative or pathological anatomy; and practical anatomy itself is so neglected, that some of the colleges announce in their circulars, attention to it will not be made obligatory! The number of professors engaged in teaching in the European schools is more than double that employed in the American ones, and sometimes four or five times as great. 5. Hospital attendance seldom forms any portion of the system of instruction, and the reporters say, that even in large cities like New York and Philadelphia, not more than one in ten of the pupils attend regularly at the hospital. Moreover, in most of the colleges all attempt at such teaching is eschewed, and a wretched substitute called "College Clinics" resorted to, at which, perhaps, the pupil may see the same patient but once or twice, when he comes for advice. 6. The system of examination is bad; for the professors examine their own pupils, and decide upon their admissibility. In some of the institutions these examinations are quite private, each professor testing the capabilities of the candidate alone and

apart from his colleagues. "Three out of seven, or two out of six, negative votes are usually considered necessary for rejection. Thus a candidate may be wholly unprepared in one or two of the most important branches—anatomy and surgery for instance—and yet receive his degree!" Lastly, if a pupil finds himself unable to undergo even such an ordeal as this, he need not despair, but may at once set himself up as doctor, only two or three of the States imposing any examination, or even any education at all, as a necessary preliminary to practice.

Mortifying as it may be to our national pride, to see American schools thus held up to reproach in the pages of one of the first medical periodicals of the times, it is impossible to escape from the position in which our own acknowledged defects have placed us; and, unless we expect tamely to fall back in the race for scientific distinction in which other nations are engaged, we must raise the tone of our professional education and literature. Instead of apologizing for existing evils as incident to our political system, and to the habits and genius of our people, we must join hands in strenuous and persevering efforts, to advance American medicine to that high point of excellence and utility of which it is as susceptible here, as in any other portion of the world.

That the American Medical Association may not relax its efforts in this good work, is the strong desire of the friends of medical progress both here and abroad. And that it is not yet prepared to do so, was, we think, fully verified by the general feeling of disappointment which pervaded the Association, on the reading of the report before us, as well as by the fact that it appears before the profession with the name of the chairman of the committee alone; two of the members, who were present at Cincinnati, Drs. Blatchford and Roberts, publicly dissenting from its conclusions, and declining to append their names to it.

(To be continued.)

Woman; her Diseases and Remedies. A series of Letters to his Class. By CHARLES D. MEIGS, M. D., Professor of Midwifery, &c., in the Jefferson Medical College at Philadelphia, &c., &c. *Second edition, revised and enlarged.* Philadelphia, Lea & Blanchard, 1851.

The first edition of Dr. Meigs' work on Woman and her Diseases, was noticed at some length in the Examiner for January,

1848. Of this second edition, "revised and enlarged," we have here only to repeat the favorable opinion previously expressed of its general bearing and value, referring our readers to the more detailed comments upon some of the author's peculiarities of style and doctrine which were then indulged in. The early demand for another edition attests the popularity of the book, and seems to leave no longer doubtful Dr. Meigs' anticipation, that the familiar and vivacious style of treating medical subjects, which he has adopted—however critics may carp—is likely to "prove agreeable to the brethren, so as to meet their approbation."

A Chart of the Signs furnished by Auscultation and Percussion, and of their Application to the Diagnosis of Diseases of the Lungs.

A Chart of the Signs furnished by Auscultation and Percussion, and of their Application to the Diagnosis of Diseases of the Heart. Revised and arranged by P. CLAIBORNE GOOCH, A. M. M. D., etc. *From the French of* O. BELLINGHAM, M. D. P. Richmond, Va. Morris & Bro.

In these two charts we have a bird's eye view of the physical signs and their causes, as they occur in the physiological and pathological conditions of the thoracic viscera, together with observations upon them.

In casting our eyes over them we have been pleased with the plan of arrangement, and only wonder that it has not occurred to others before to construct such an exposition of these subjects for office reference. There are a few points, however, in which we differ, and think the American editor might have improved upon the original; for instance: In explaining the cause of the crepitant râle in pneumonia, the author describes it as produced "by the passage of air, in inspiration, through a muco-sanguinolent liquid secreted in the air cells and minute bronchial tubes." We know that for this there is high authority, but it has nevertheless, always seemed to us that the explanation of Dr. Carr, of New York, was more satisfactory. This observer ascribes it to the separation of the inner surfaces of the air vesicles, which had become adherent to each other during expiration, in consequence

of the viscid, but scarcely *fluid* secretion, with which their interior is lined. This view seems confirmed by the observations of Messrs. Rainey and Hutchinson, by whom it is shown that each bronchial tube terminates in a cluster of cells, instead of a single vesicle, as described by Reiseissen. This explanation of the cause, however, does not detract from the value of the sign as a means of diagnosis.

There are one or two points of expression which we think might also be improved by substituting others; for instance, metallic *tinkling*, for metallic *tingling;* the word *nipple*, instead of teat, &c., &c. These will doubtless meet the eye of the translator in preparing a new edition. The text of the author is very fairly rendered.

The Charts, it should be mentioned, are made up from the works of Laennec, Williams, Barth & Roger, Gerhard, Spittal, and other high authorities, and we have no question but that they will prove very acceptable, as well as useful to the profession.

The Family and Ship Medicine Chest Companion: being a compendium of Domestic Medicine, Surgery, and Materia Medica, with Directions for the Diet and Management of the Sick Room, &c., &c. Selected from standard works by a PRACTISING PHYSICIAN. Philadelphia, Lindsay & Blakiston, 1851.

We have so often expressed our opinion of the tendency of the unrestricted circulation of *household* works on medicine, that it is unnecessary here to reiterate it. Under many circumstances, however, where medical aid is beyond reach, such books are undoubtedly desirable and useful, and we have great pleasure in recommending this little manual as an excellent work of the kind. The publishers very properly represent "the object of the work to be, to afford assistance to those who are removed from medical or surgical aid, but *in no way* to delegate the treatment and care of the sick to the inexperienced, when other assistance can be obtained."

THE MEDICAL EXAMINER.

PHILADELPHIA, JANUARY, 1851.

TO OUR READERS.

In presenting our readers with the first number of the fourteenth volume of the Medical Examiner, we take great pleasure in announcing that hereafter the editorial department will have the valuable assistance of Dr. John B. Biddle, the originator and first editor of this journal. To most of our readers he is well known, especially to those who have been recipients of the Examiner from its earliest date. Under his care it was born and grew to a goodly stature, and he now returns to it once more with the same zeal that actuated him in its foundation. We congratulate ourselves as well as our readers on this change, being well satisfied that it will work to the advantage of all concerned.

We shall aim, hereafter, to devote an increase of space and attention to our clinical department. This journal is, we believe, the only one in the country, not of very recent date, that has ever systematically attempted to present reports of cliniques, and of hospital and clinical lectures, and we believe that it has always proved an agreeable and interesting feature to our readers. Our arrangements for the future will place at our disposal regular reports of the proceedings of the schools and hospitals of Philadelphia in this particular. It is not our intention, however, to overburthen our columns with a fatiguing detail of trivial and every-day cases, but we shall endeavor to make such a selection from the ample supply of materials, which the metropolis of American medicine is constantly offering, as to present a faithful reflection of its clinical practice, wherever novelty and importance of treatment and cases may claim notice.

It will be found that the cliniques of the two large schools furnish no inconsiderable proportion of our reports. We are aware that, in some quarters, these cliniques have been in disfavor, from an impression that they are designed to take the place of genuine hospital instruction, for which they are certainly not to be considered a substitute. It should be noticed, however, by those who have been led to condemn this method of instruction, that confessedly inferior as it is to the daily minute observation of disease, which is only to be practised by the bedside in the wards of a well regulated hospital, it is really hardly different in character from the *am-*

phitheatrical lectures delivered in these institutions. True clinical instruction can be given only to classes of some half dozen or dozen at the bedside, a plan everywhere incompatible with the size of the winter classes here. And when it is borne in mind that a narrow feeling on the part of the managers of our Alms House has closed its fine hospital as a means of study, we think it is unfair to undervalue the college cliniques, where a vast and interesting mass of disease is collected and turned to account, which, but for them, would for the most part be lost to science. In an ethical point of view, the cliniques are perhaps assailable as a source of indiscriminate gratuitous medical service. But we have at present only to do with their scientific and educational bearing.

The original, bibliographical, and foreign departments of the Examiner will claim no less of the editors' attention than heretofore, and they will endeavor still to maintain its reputation for candor and impartiality; sparing no pains to make it in every respect a "Record of Medical Science," worthy of the highly intelligent and respectable list of readers who have so long honored it with their support.

ON THE USE OF TOBACCO.

We have received a communication from Dr. P. C. SUTPHIN, of Bedford county, Virginia, on the "Influence of Tobacco on the Human System," which we regret that the pressure on our columns at present, obliges us to defer publishing in extenso. Dr. SUTPHIN'S attention was led to the topic by an article, which appeared in the Examiner for October last, on the pernicious effects arising from habitual indulgence in the use of tobacco. As the result of considerable experience in the tobacco-growing region of Virginia, where its use is almost universal, "and generally to excess," Dr. SUTPHIN is of opinion that it has no appreciable influence in the development of diseases of the heart or stomach. "It is but seldom we are called upon," he says, "to treat heart diseases, and when we are, we can generally trace their origin to an attack of rheumatism, or some other cause distinct from tobacco. Dyspepsia and other diseases, enumerated in the article which appeared in the October number of the Examiner, are not more common amongst those who use tobacco, than amongst those who do not. Any unprejudiced physician acquainted with these facts, will corroborate the statements made here. Dyspepsia and heart diseases are almost unknown among our negroes, who use a great quantity of tobacco. I have known vast numbers of negroes to chew and smoke almost incessantly, and nevertheless enjoy the greatest possible health."

Testimony like this—from so respectable and well-informed a quarter—certainly goes far to shake the belief, which we take to be general, in the injurious tendency of constant and excessive indulgence in tobacco. "When employed in excess," says Dr. Wood, in the U. S. Dispensatory, "it enfeebles the digestive powers, produces emaciation and general debility, and lays the foundation of serious disorders of the nervous system," and Dr. Chapman "has met with several instances of mental disorder closely resembling delirium tremens, which resulted from its abuse, and which subsided in a few days after it had been abandoned." This is the impression generally of writers on the materia medica. That an article, the effects of which on persons unaccustomed to its use, are so powerful—espcially *on the functions of the stomach and heart*—should find in the human system an adaptability to its action, entirely counteracting its original noxious influence, is not a little remarkable, particularly with our experience of the results of the abuse of opium and alcoholic stimuli.

We must allow, however, that the facts elicited from our correspondent, deserve great weight—not only from his necessarily extended familiarity with the effects of the use of tobacco, but also from his favorable position for observing them, independently of the many causes of gastric and cardiac disorder, which are to be found in large cities. For it may be, that tobacco has been unjustly charged with consequences pernicious to the health, which are really, in the main, traceable to the mental excitement and sedentary habits of town life. We should be glad to hear from others of our readers in the tobacco districts, and, indeed, from any who may have positive facts to communicate on the subject.

The length of the original communications in this number, with the mass of clinical matter which has accumulated on our hands, has obliged us somewhat to encroach upon the space usually allotted to our 'Record of Medical Science.' We shall not, however, allow this interesting department of the journal to be permanently abridged—but shall aim to present hereafter, each month, to our readers, a carefully collated and full retrospect of the improvements and discoveries in the different branches of medicine.

MONUMENT TO JENNER.

We learn with pleasure from the British journals, that a bronze statue of JENNER is to be placed in the open air, in some situation in London. Mr. Marshall, the eminent sculptor, who has received the original bust of Jenner from Dr. Baron, is going on with a cast of the intended monument, which he expects to finish, so as to place it in the great exhibition of 1851; and he hopes to complete the work in bronze in 1852.

TO THE MEDICAL PROFESSION.

The undersigned, Chairman of the Standing Committee on *Practical Medicine*, appointed by the American Medical Association, May, 1850, respectfully solicits the co-operation of the members of the Medical Profession, in furnishing materials for the Annual Report in May, 1851. The duty of this Committee, as defined by the Constitution of the Association, is to "prepare an Annual Report on the more important improvements effected in this country in the management of individual diseases; and on the progress of Epidemics; referring, as occasion requires, to medical topography, and to the character of prevailing diseases in special localities, or in the United States generally, during the term of their service." In order to fulfil the objects thus expressed, the requisite data must be supplied by medical practitioners in different sections of the Union. This is more particularly true with reference to the "*progress of epidemics*," and "*the character of prevailing diseases in special localities.*" Communications, therefore, are particularly desired from persons residing in places in which Epidemics have prevailed, or in which prevailing diseases have been marked by special characters during the present year. Epidemic Cholera and Dysentery are known to have prevailed more or less extensively in different parts of the country during the past summer. Facts bearing upon the features peculiar to the present season, the production, diffusion, mortality, treatment, etc., of these diseases will be acceptable. It is requested that communications upon these or any of the subjects coming under the cognizance of the Committee, be transmitted to the undersigned, by the first of March, 1851.

All contributions with which the Committee may be favored, will receive due attention and acknowledgment

AUSTIN FLINT.

Buffalo, New York, Nov., 1850.

Editors of Medical Journals will confer a favor by copying the above.

RECORD OF MEDICAL SCIENCE.

MATERIA MEDICA AND THERAPEUTICS.

New Antiperiodics.—The French medical world has been lately on the *qui vive*, on the subject of antiperiodics, stimulated by a prize of 4,000 francs, offered by the Society of Pharmacy, for the discovery of a substitute for Quinine, and to which the French Minister of war has offered to add an equal sum. M. Delioux, Professor of Materia Medica, at Rochefort, maintains that CHLOROFORM is a powerful succedaneum for cinchona and arsenic. A sufficient number of cases of periodic fevers, which are

very common at Rochefort, were treated at the hospital there, with chloroform, and with such a regularity of success, that M. Delioux feels warranted in recommending it as a powerful antiperiodic. The chloroform was given in doses of from nine to thirty grains, according to the severity of the case. The patients took it several times before the access, and continued its use for several days. To make a good mixture, the chloroform is to be first rubbed up with syrup, and then it mixes readily with water. —*Journal de Med. et Chirur. Prat., July*, 1850.

The Physalis Alkekengi, or winter-cherry of France, is also proposed as a remedy for intermittents. The whole plant, twigs, leaves, capsules and berries, are described as possessing the anti-periodic qualities of cinchona—*Gaz. Méd., July*, 1850.

Acetate of Potash in some Diseases of the Skin.—Dr. Easton, of Glasgow, having been led by the publication of Dr. Golding Bird's Lectures, to employ Acetate of Potash, in some diseases of the skin, has published the results at which he has arrived, in an important practical paper, in the Edinburgh Monthly Journal, for May, 1850. Several cases are given, of Psoriasis Diffusa, Eczema Impetiginodes, Eczema Rubrum, Psoriasis Palmaris, Lepra Vulgaris, &c., which were rapidly cured under the use of the Acetate of Potash, with no other assistance than occasionally the alkaline warm bath, and fomentation of the affected extremities, with blood-letting, in one febrile case, and a catharto-diuretic mixture in another. Half a drachm of the medicine, thrice daily, is the dose for an adult.

Dr. Easton considers the medicine to act: 1. As a Diuretic, as its use was always followed by a great increase in the amount of urine. 2. Not only is the amount of the *water* of the urine increased, but also its solid constituents in so remarkable a degree, as to entitle it to be considered as a renal-alterative or blood-depurant, as well as a renal-hydragogue. 3. Like all the salts of the vegetable acids, it is converted in its progress through the system, into a carbonate, and to this conversion substantially its benefit is owing. But the administration of the carbonate itself does not produce the effects which follow the use of the acetate. Hence Dr. Easton infers that the physiological action and therapeutic efficacy of the acetate are connected in some manner—unknown at present—with the metamorphosis which takes place in itself.

Poisoning with Secale Cornutum—Dr. PRATSCHKE was called on the 12th October, 1844, to a woman who, with her three children, had been taken ill the day before. Five days previously they had eaten bread which contained a large proportion of blighted corn. The mother, forty years of age, complained of uneasiness and heaviness in the head, oppression at the stomach, loss of appetite, and diarrhœa; but she did not feel ill enough to take to her bed. The eldest daughter, eighteen years of age, complained of a violent sense of burning in the hands and feet, and especially in the fingers and toes, which were bent and stiff. The lips were retracted so as to expose the teeth; the tongue white and moist; the

skin dry and cool; the pulse 90, and small: the patient was very restless, and expressed urgent thirst; the abdomen was soft; the bowels acting; the urine pale. She died on the following day in violent convulsions.

The second daughter, seven years old, had the same affection of the lower extremities, which in her case occurred periodically: her appetite was good: she had also diarrhœa.

The third child, four years old, suffered only from diarrhœa.

An emetic was given to all in the first place; camphor was afterwards administered.

The mother suffered for a few days from tetanic cramps, and continued to complain of great anxiety, loss of appetite, and diarrhœa. After the exhibition of valerian, muriate of ammonia, and ipecacuanha, followed by extract of nux vomica, these symptoms disappeared, but were succeeded by anesthesia of the soles of the feet.

The second daughter was restored to health, with the exception that she had not recovered the use of her legs.

The youngest child suffered from tetanic cramps for several days; and considerable stiffness of the limbs remained, so that she frequently fell in walking. This subsided under the use of aromatic baths.—*Lond. Med. Gaz., from Casper's Wochenschrift.*

Poisoning with Dulcamara. By Dr. Plaetschke.—A man 40 years of age, who was using decoction of dulcamara-stalks for a cough, took, one forenoon, from three to four quarts prepared from a peck of the stalks. In the evening he was suddenly seized with numbness in his limbs, and pains in the knees and elbows, dryness of the throat, and paralysis of the tongue. These symptoms increased so much in the course of three or four hours, that he could scarcely move either his limbs or tongue. The head remained unaffected, consciousness unimpared, the pulse quiet, but small and rather hard, breathing regular, the skin cool; there was neither nausea nor vomiting. From the time which had elapsed since taking the decoction, the administration of emetics was contra-indicated; recourse was therefore had to stimulants. Camphor was given freely, and the symptoms gradually disappeared.—*Lond. Med. Gaz. from Casper's Wochenschrift.*

Sudden Death from the long-continued use of Carbonate of Soda.—Dr. Tunstall, of the Bath Dispensary, reports in the London Medical Times, November 30, 1850, a case of very sudden death, traceable to the abuse of alkalies. The subject, a tall muscular man, 53 years old, of temperate habits, dropped down dead in the streets of Bath. About eighteen years since he first began to complain of severe dyspepsia, for which he was advised to take a small quantity of the bicarbonate of soda; when necessary, this quantity he had gradually increased until he took half a hundred weight yearly, or rather more than two ounces daily, for sixteen years. During this period he had two severe and long continued fits, the last five years since, when he remained cold, insensible, and passive, for nearly thirty minutes. He had been travelling for twenty-four hours previously to his death by a stage wagon, had alighted for the pur-

pose of inquiring his way, and, while in the act of speaking to his daughter, fell dead. He had dined five hours before, and had drunk half a pint only of beer; had taken several doses of soda on the road, more than a pound of which was found in his pocket when the body was searched.

A post-mortem examination was obtained only of the abdominal cavity. The following is the account of it:—Externally the body was blanched, and upon making an incision little cellular or adipose tissue was met with; the muscles were pallid, resembling veal after bleeding; upon opening the abdomen the stomach was discovered enlarged to twice its natural size, occupying the whole of the superior third of the abdominal cavity; its peritoneal surface was covered with reticulated blood vessels, and a bright brick-red blush, commencing with the cardiac extremity, extended over one-third of its surface. Upon opening it the whole mucous membrane was found disintegrated and pulpy. Numerous ulcerations, varying in size from a pea to a large bean, were scattered throughout, so that its first appearance was like that of a polished tortoise shell. During its removal from the body, which was carefully done by Mr. Goldstone, its coats gave away to the extent of three inches, leaving a rough edge; the stomach contained half a pint of a strong acid fluid, with portions of meat in a partially digested condition; the small intestines presented similar appearances to those found in the stomach, and there was little or no fat in the omentum.

The liver was contracted in size and consolidated, as was the spleen.

Dr. Tunstall was inclined, he says, at the first view, to believe that it had arisen from nervous apoplexy, but this idea was negatived by the fact, that up to the moment of his death he had been in conversation with his daughters, and that death was instantaneous and complete; there was no evidence of a rupture of the heart or great vessels, for I counted three distinct pulsations under my hand; so that I think we may safely affirm that the fatal attack was one of syncope, produced by the attenuation of the circulating mass by the long continued use of the alkali.

That a great analogy exists between the effects of long-continued alkaline remedies and scurvy is well pointed out in Pereira's "Elements of Materia Medica," where, speaking of liquor potassæ, he says, "it appears in the highest degree probable, that scurvy, and the effects caused by the long-continued employment of the alkalies, are analogous conditions of system.

Carbonate of soda has, within the last few years, become almost an established article of diet of daily consumption in our tea, and for the purpose of neutralizing the acidity of malt liquors; so that, apart from the curiosity excited by the present case, I am anxious that its relation should have a practical importance; that it may be taken with supposed impunity, in large doses, for a period of sixteen years, the present case testifies. We have a laborious artisan, never complaining of severe illness, taking what he supposed to be an innocent remedy for dyspepsia, and who, no doubt, had he complained of illness, would not have thought it of sufficient importance to mention, as his daughter did at the inquest, until Mr. Goldstone suggested the question to the Coroner.

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—NO. LXXIV.—FEBRUARY, 1851.

ORIGINAL COMMUNICATIONS.

Lectures on Scarlet Fever. By CASPAR MORRIS, M. D., Philadelphia, late Lecturer on Practical Medicine in the Philadelphia Medical Institute.

LECTURE I.

Description of the Disease.

So fatal have been the results, so fearful the ravages, so wide spread the devastation of this disease, so interesting the period of life at which it commonly occurs, just as parental hopes are budding with promise, and the tendrils of affection entwining themselves the most closely round the heart, that the very name is a signal of distress, and its introduction into the family circle is looked upon as the entrance of the angel of death with an irreprievable warrant to destroy. The parent sits down in the evening the happy centre of a group of smiling objects of affection, his heart swelling with delightful anticipation as his eye glances around the circle; and ere the next return of the same weekly period, half of them slumber in the embrace of death. The

mother's nightly visit is paid to the couch of the only idol, upon whom her hopes are concentrated, and to which the sacrifice of anxious love is hourly offered, and leaves it sleeping tranquilly, no forecast shadow giving sign of the coming sorrow; the morning finds it stricken down by disease, and the evening an inanimate corpse given over to the power of corruption. These are no fancies, no exaggerated images of wo. There is not a practitioner of any extended experience but must acknowledge that he has not only witnessed such scenes, but been a miserable participator in their anxieties and grief. Of many such instances it may be said with truth, no skill could avert the result. Alas! of too many, that well meant but ill directed effort—to use the language of Sydenham, "nimia diligentia medici"—has hurried them needlessly to the tomb.

Nor is it by this rapidity of its course, alone, that scarlet fever is invested with its character of dread. Treacherous beyond all other diseases, cases apparently the least violent, "scarcely deserving the name of disease" in the earlier stages, not unfrequently develop lesions of the most formidable kind in their progress, and result in a fatal termination; while in others, a train of painful and disgusting sequela gradually exhaust the strength with long continued suffering, and entail consequences which remain for years, or even during life. It must be evident that such a disease demands the most careful investigation into its character, cause, and treatment.

I shall not detain you from the consideration of these by any discussion of the various names by which it has been called, nor of the propriety of the divisions which have been adopted by different authors. Objections may be brought against, and arguments adduced in favor of, most if not all these terms and divisions. A name it must have, and *Scarlet Fever* will answer as well as any that can be proposed; though you will find as we progress in the consideration of its symptoms, that some cases have little and others none of the peculiar eruption from which this term is derived. Divisions we must make in order to enable you to classify the cases, and arrange properly your ideas of its character and treatment; and the terms *simple*, *anginose*, and *malignant*, will embrace most cases, though I shall be obliged to notice others, which, not being reducible to either of these classes, though evidently derived from the same origin, I shall designate

as *irregular*. Never, however, allow yourselves to forget that these are but various phases of one disease, which fall into each other by imperceptible shades; so that while the cases which may be assumed as types of each class have strong marks of distinction, there are others which it is difficult to distribute to either.

There is no disease the onset of which is more unexpected or more violent. Rarely indeed are there any premonitory loss of appetite, languor, or headache. Even when the known presence of the disease in a family leads to anxious watchfulness, no deviation from the usual habits marks the individual subject of the next attack. The invasion is generally in the night. A child spends the day in the most perfect enjoyment of health, runs abroad freely, eats heartily, retires to bed as usual, sleeps soundly during the earlier hours of the night, awakes with sick stomach, vomits freely, throwing off the food taken perhaps at the mid-day meal, becomes restless and fretful, has great thirst and heated skin, and when returning daylight affords opportunity of investigation, is found thickly covered upon the face, neck, and chest with a vivid scarlet rash, consisting of minute points interspersed upon a uniform efflorescence, which disappears under the pressure of the finger, but is instantly renewed on its removal. The physician is sent for and finds the pulse beating with a rapidity almost pathognomonic of the disease, so that if precluded from any other mode of investigation, he might, with but little danger of error, predicate scarlet fever from its great frequency alone. The tongue is red and slightly coated with a white fur, through which frequent villi project, reminding him of the strawberry, by contrast; the surface being white and the protruding points of a vivid scarlet color. He looks further, and sees the whole mucous membrane of the mouth and fauces partaking of the same intense redness, with stigmata thickly sown upon it. The child is restless and distressed. Such would be the symptoms of the invasion of a case of simple Scarlet Fever.

Ushered in thus suddenly, the disease pursues a rapid course. Scarcely is the existence of the rash recognized before it is extended to the whole surface of the body; and finally to the lower extremities, which it reaches by the third day, at which period it begins to fade from the parts on

which it first presented itself; the whole duration of the disease not often exceeding five days. There is not in this, as in the pustular and vesicular exanthems, a diminution of the febrile symptoms with the appearance of the eruption. The rapidity of the pulse which is rarely less than 120 per minute, and the heat of the skin, remain unabated. There is no disease in which the heat of the surface is greater. Not only does it communicate a peculiar pungent sensation to the finger, but by actual measured observation it sometimes rises to 105°, 108°, or 110° of Fahrenheit. There is no elevation of the rash *essential* to this eruption, which is often attended by an itching almost as intense as that of urticaria; but in some cases there are small papular elevations on the arms and legs, and it is not at all uncommon to find innumerable clear vesicles of very minute size scattered over the thorax and abdomen, which are very perceptibly elevated both to the sight and touch. The serum they at first contain is rapidly absorbed, leaving the cuticle to form minute glistening scales, separating much sooner than the general desquamation, which takes place at the close of the disease. The intensity of the eruption does not mark the degree of violence; some very mild cases having a vivid universal rash, while in others equally benign it is partial in extent and less bright in its hue. In these cases of simple scarlet fever the condition of the digestive organs varies much. While in some there is an entire loss of appetite, in others there is as constant a desire for food as in health. The bowels are unaffected in the simple form, and indeed in the primary stage of all the varieties of the disease. The kidneys too, maintain their healthy functions during the first four days, but toward the close of many cases the urine becomes scanty in quantity and high colored, but destitute of any deposit.

The functions of the skin are impaired in proportion to the intensity of the eruption. In some mild cases I have known it to continue moist and even perspirable during the whole progress of the disease.

Peculiar as was the appearance of the tongue in the beginning, it becomes still more marked as the case advances. The fur which in the variety now under consideration is never dense, is thrown off suddenly on the second or third day, beginning generally to clear off at the tip and sides, and the surface is

left more entirely denuded than in health, of a color varying in intensity in proportion to the violence of the case. Sometimes but slightly reddened, at others it assumes a hue not much differing from that of raw beef, while the papillæ, elongated or swollen, rest upon a surface often smooth and glazed. This condition of tongue is doubtless owing to the same process taking place in the mucous membrane as that which is known as desquamation of the cuticle, and continues about the same length of time. The symptoms are sometimes so mild, and the nervous system is so little involved in the disease, that the patient may pass through all the stages without requiring any attention. You will find, however, when we come to treat of the sequela that such cases are by no means devoid of interest nor free from danger. Sometimes the character of an entire epidemic is thus mild, and this must undoubtedly have been the case in that recorded by Sydenham, who does not notice the anginose symptoms, though he describes with his usual perspicuity the symptoms as we have just given them to you.

It must not, however, be supposed that all cases of simple scarlet fever are thus mild in their character. In some instances from the intensity of the cause, and in others from the peculiarity of the individual attacked, the nervous system feels more decidedly the impression; and we then have the case complicated with symptoms of a more formidable character. The vomiting or nausea, by which, as I before remarked, the disease is almost invariably ushered in, may be accompanied or followed by violent convulsions; which are often of a peculiar, tetanic character. When the impression is less severe there will be constant contractions of the muscles of the forearm, with startings of the tendons, and twitchings of the fingers; and occasionally we have coma, or even the wildest delirium, manifested by screaming and frequent starting from slumber. On the third or fourth day it is no uncommon event to have the patient complain of pain in the ear, or seized with drowsiness, either of which, after continuing twenty-four hours, will in all probability be followed by the discharge of a thin serum from the external meatus auditorius, which excoriates the neighboring skin, and gives rise to a vesicular eruption in the adjacent parts.

As the rash fades it leaves the surface covered with a dry cuticle,

which separates in very thin scales successively from the face, neck, chest, arms, and legs. The density of these scales depends upon the part of the body and the violence of the eruption. They are very delicate on the face, neck, and arms, while from the hands and feet, where the cuticle is thickened by pressure, it comes off in large patches, and may even, in some instances, be brought away entire.

In the *Anginose* variety, we have the same series of events as those just described, and generally in an aggravated degree. The rash may appear even more vivid, or it may be present only in patches about the folds of the body and on the back and abdomen, or about the flexures of the larger joints, or sometimes only on the hands and feet. The nervous symptoms are more often manifested, and more violent when present. There is often very great tremor of the muscles and disposition to sleep, and when aroused the child is fretful. On looking into the throat there will be found not only the redness which has been described as marking even the cases which have no anginose character, but also a swollen condition of the tonsils and soft palate. They are sometimes œdematous from the very commencement; and corresponding with the internal disease, we find a tumor under one or both angles of the jaw, which is circumscribed and limited in size, and entirely different both in character and appearance from the diffused swelling which will be noticed hereafter. This tumor is not peculiar to scarlet fever, but is similar to that which occurs in every case of inflammation of the tonsils. The difficulty of deglutition is considerable from the very beginning, and there is very often stiffness of the muscles of the neck. The pulse has even greater frequency than was noticed before, but generally less force, yielding more before the pressure of the finger; corresponding in this respect with the general want of tone of the whole system, the frequency evidently depending not on inflammatory stimulation, but on nervous excitement. From the very commencement of the anginose affection there is an abundant secretion of viscid mucus which adheres to the surface of the tonsils and palate, and occasions much annoyance, disturbing the sleep and causing the patient often to start as though strangling; and when this condition extends to the mucous membrance lining the nostrils, and they become obstructed also, the interruption to the

free access of air not only adds to the suffering, but materially increases the danger by preventing the proper oxygenation of the blood already vitiated by the influence of the morbid poison. On examining the condition of the fauces there will often be seen deposits of lymph upon the surface of the tonsils, sometimes white, at others ash-colored and even darker, the color depending upon the presence of effused blood. These exudations have been mistaken for ulcers. In general they may be easily removed either by gargle or other mechanical agency, leaving the surface of the mucous membrane beneath them like the adjacent structure. In other cases they do cover ulcerated spots. This is, however, more frequent in that aggravated form which will claim our attention hereafter. They are generally confined to the surface of the tonsils, but occasionally extend to the fauces and even to the larynx; giving rise to one of the most formidable complications that can occur. The inflammation often extends from the fauces through the eustachian tube to the membrane lining the inner ear; giving rise to intense otitis. Still more frequently the lining of the external meatus takes on ulcerative action, as mentioned when describing the simple form. In either case the pain is severe, and the ulceration destroys the soft tissues, and even invades the bony structure of the ear; causing the loss of the ossicula and leaving the patient subject to prolonged offensive discharge and permanent loss of the sense of hearing. As in the case of the simple disease the tongue generally casts off its coat about the third day, assuming a still more angry appearance than that formerly described. Not unfrequently its edge as well as the mucous membrane lining the posterior nares and fauces take on ulcerative action, and then the lymphatic glands of the neck become much enlarged and exceedingly painful and tender to the touch. I have repeatedly seen both sides swollen, with effusion into the cellular tissue to such a degree as materially to impede the respiration of the child and totally to forbid deglutition. No more pitiable object can be presented than one of these cases. The commissures of the lips so sore that they bleed at every movement of the mouth; the tongue red and polished; the mucous membrane of the fauces turgid and ulcerated; the lymphatics of the neck swollen; and the cellular tissue of the

neck infiltrated with serum, till the hollow between the jaw and clavicles is entirely filled, and the skin is stretched and looks as though it were polished vellum; the head thrown back to remove the pressure from the swollen throat and to facilitate the access of air to the larynx; the nostrils distilling an acrid sanies which is puffed out with a sputtering noise at every expiration, and excoriates the lip and cheeks as it flows over them, and even abrades the cuticle from the back of the hands, instinctively applied to remove it from the nostrils, and thus afford more freedom of respiration; the corners of the eyes ulcerated also,—the wretched child lies unable to swallow; (even the smallest portion of liquid taken into the mouth being ejected through the nose,) and suffering all the pains of hanging; till the most earnest prayer of the fondest parent is for its death. Yet even from such condition we may hope for recovery.

In the anginose form the stages of the disease are as regular as in the simple variety. They are not, however, so perceptible. This is caused by the accession of these secondary sources of irritation which give rise to a fever even more intense than that which has been already described, which naturally terminates on the fifth day. In the most favorable cases the subsidence of the primary symptoms is followed by the decline of the ulceration and consequent glandular disease, and convalescence is established, until the occurrence of some of the sequelæ, which will be noticed hereafter. In other instances these secondary results do not develope themselves until after the crisis of the primary disease has been safely passed.

There is a complication which occasionally modifies this form of scarlet fever, and has given rise to some difficulty of diagnosis which it may not be improper here to refer to. Instead of the extreme symptoms just mentioned, there is only a slight ulceration of the mucous membrane of the nares, which gives rise to symptoms resembling coryza, and the whole case may be considered a cold with rash, and its true nature not being suspected in the primary stages, is first proven by the development of more formidable symptoms in the second stage; or, if the rash be better developed, there is sometimes difficulty in distinguishing the case from one of measles, as I have known highly intelligent and experienced physicians at a loss. This is more especially

liable to occur in those instances where an impeded respiration gives a darker hue than natural to the eruption.

But if in thus describing the horrors of the anginose scarlet fever, the mind turns with a shudder from the delineations of memory, what shall we say of the *Malignant form?* The mere presentation of the subject to you is "infandum renovare dolorem," and you may well desire to know it only by report. Under this term it is my intention to include only those cases which have by some been regarded as a violent form of the anginose scarlet fever, leaving for the class of *irregular* cases those varieties which, though of the most grave character, have no affection of the throat.

In *Malignant* Scarlet Fever there are violent pains of the legs and arms, and the rash may make its appearance on the back of the hands and the feet before it is seen on any other part of the body. The temperature of the body varies. In those cases in which the prostration is extreme, it is cold; and the rash, if it appear at all, has a livid hue, and may assume the appearance of purpura, and even be mingled with petechiæ and vibices. In some cases the rash comes out imperfectly for a time, and then disappears, re-appearing again so late even as the seventh day. Instead of the general flush like the efflorescence of the simple scarlet fever, there are only points about the flexures of the limbs, or those parts of the body which are kept the warmest. Often it does not appear at all, the whole body being rather of a *waxy paleness;* at other times there is an intense lurid erysipelatous flush which is even occasionally of a livid hue.

The condition of the throat and brain vary also; I have seen the brain intensely excited from the very onset of the disease, though in general there is coma more or less profound. The throat is swollen so as almost to render deglutition impossible. The tonsils, uvula, and soft palate lie flaccid, looking more like portions of purple velvet than living tissue; coated with black lymph in large portions; which, slightly loosened at the edges, betray an ulcer beneath; a horrible ichor discharges from the nostrils, and the room is filled with the most offensive fetor. In many instances the powers of life are totally prostrated from the very beginning. A child will be running about in apparently perfect health one hour

"feeling its life in every limb," and manifesting its power in untiring gambols, and the next may be found with a glassy and sunken or upturned eye, feeble and frequent pulse, cold surface, great jactitation, and will sink steadily to death in despite of every effort; the sedative influence of the miasm being so intense that no reaction takes place. The disease is not in fact fully developed, and its character might be doubted were it not that the subsequent discovery of an imperfectly formed eruption about the neck, or the occurrence of other cases in the same family or neighbourhood, afford sufficient evidence of its true nature. But the chaste and accurate description of an epidemic form of the disease given by the distinguished Fothergill, nearly a century ago, can scarcely be improved upon. He says, "it comes on generally with such a giddiness of the head as commonly precedes fainting, and a chilliness or shivering like that of an ague fit; this is soon followed by great heat; and these interchangeably succeed each other during some hours, till at length the heat becomes constant and intense. The patient then complains of an acute pain in the head, of heat and soreness rather than pain in the throat, stiffness of the neck, commonly of great sickness, with vomiting or purging, or both. The face soon after looks red and swelled, the eyes inflamed and watery as in measles, with restlessness, anxiety, and faintness. The disease frequently seizes the patients in the fore part of the day. As night approaches the heat and restlessness increase, and continue till towards morning, when after a short and disturbed slumber (the only repose they often have during several nights,) a sweat breaks out, which mitigates the heat and restlessness, and gives the disease sometimes the appearance of an intermittent." (This fluctuation, even in diseases where the lesions are fixed and unchangeable, is one of the most mysterious circumstances which passes under our observation. The cause is as yet wholly unknown.) "If the mouth and throat be examined soon after the first attack, the *uvula* and *tonsils* appear swollen; and these parts, together with the velum pendulum palati, the cheeks on either side near the fauces, and as much of them and of the pharynx behind as can be seen, appear of a florid red color." (This color varies in different cases.) "The color is commonly most observable on the posterior edge of the palate in the angle above the tonsils and on the tonsils

themselves. Instead of this redness, a broad spot or patch of an irregular figure and of a pale white color, is sometimes to be seen surrounded with a florid red, which whiteness commonly appears like that of the gums immediately after being pressed with the finger, or as if matter ready to be discharged was contained underneath."

"Generally, on the second day of the disease, the face, neck, breast, and hands to the fingers ends, are become of a deep erysipelatous color, with a sensible tumefaction; the fingers are frequently tinged in so remarkable a manner that from seeing them only it has not been difficult to guess at the disease. A great number of small pimples, of a color distinguishably more intense than that which surrounds them, appear on the arms and other parts. They are larger and more prominent in those parts of the same subject, where the redness is least intense; which is generally on the arms the breast and lower extremities." (In a later edition of his works, 1754, Dr. Fothergill adds a note which is perfectly characteristic of the disease.) He says, "The *redness* and *eruption* have not accompanied this disease so regularly, during the latter part of this winter, as they did in the preceding seasons; in some cases they did not appear at all; in others not till the third or fourth day; and, as I have heard, in some not till the fifth, and even later." I have already drawn your attention to this want of eruption in many cases.

"As the skin acquires this color the sickness commonly goes off, the vomiting and purging cease of themselves, and rarely continue after the first day. The appearance of the fauces continues to be the same, except that the white places become more ash-colored, and it is now discoverable, that what at first might have been taken for the superficial covering of a suppurated tumor, is really a slough, concealing an ulcer of the same dimensions. All the parts of the fauces above mentioned are liable to these ulcerations, but they generally are first discoverable in the angles above the tonsils or on the tonsils themselves; thoughthey are of ten to be seen in the arch formed by the uvula and one of the tonsils, and also on the pharynx behind, on the inside of the cheeks, and the base of the tongue, which they cover in the manner of a thick fur. Instead of these sloughs where the disorder is mild, a superficial ulcer, of an irregular figure, appears in one or more of these parts, scarce to be dis-

tinguished from the sound, but by the inequality of surface it occasions."

"The parotid glands on each side commonly swell, grow hard, and are painful to the touch;* if the disease is violent, the neck and throat are surrounded with a large œdematous tumor, sometimes extending itself to the breast, which, by straightening the fauces, increases the danger. Towards night, the heat and restlessness increase, and a delirium frequently comes on. This symptom, which appears in some even on the first night, seems to differ considerably from the like affection in other diseases. The sick commonly answer the questions put to them properly, but with an unusual quickness; they talk to themselves incoherently when left alone, and frequently betray the first tendency to this disorder by affecting too great composure." (In this circumstance it is only coincident with other malignant diseases, as yellow fever, cholera, &c.) "This, for the most part, happens to those who sleep but little, for some are comatose and stupid, and take little notice of anything that passes. In this manner they continue during two, three, or more days; they commonly grow hot and restless toward evening, which symptoms, and the delirium, increase as night comes on; a sweat more or less profuse breaks out toward morning, and from this time they are easier during some hours; a faintness only continuing, of which they frequently complain more than of the rest of their sufferings. The disease seems to have no stated period which can properly be called its Ἀκμη or height. Some grow easier from the first day of the attack, but in general the symptoms of recovery appear on the third, fourth, or fifth day, and proceed in the following manner. The redness of the skin disappears, the heat grows less, the pulse which was hitherto very quick becomes slower, the external swellings of the neck subside, (sometimes they continue to increase and suppurate,) the sloughs on the fauces are cast off, the ulcerations fill up, the patient sleeps without confusion, is composed when awake, and his appetite begins to return.

The *pulse* during the whole progress of this disease is generally very quick, frequently 120 or more in a minute; in some hard and small, in others soft and full, but without that strength and

* This is an error. The swelling is not of the Parotid, but of the Lymphatic glands under the angle of the jaw.

Colon - from a Child. 4 years old.

Appendix Vermiformis - from a foetus.

firmness which usually accompany equal quickness and heat in genuine inflammatory disorders."

"If a vein be opened soon after the distemper is come on, the blood generally appears of a fresh florid red; the crassamentum is rather of a lax gelatinous texture than dense or compact; the serum yellow and in large proportion.

"The *urine* is at first crude, and of a pale whey color. As the disease advances it turns yellower, as if the bile was detected in it, and soon after the patient shows any marks of recovery, it grows turbid and deposits a farinaceous sediment."

(To be continued.)

On the Structure of the Mucous Membrane of the Appendix Vermiformis Cœci and Colon. By JOHN NEILL, M. D., *Demonstrator of Anatomy in the University of Pennsylvania.*

(With a colored Plate.)

The capillary vessels present great diversities of arrangement in the different organs of the body. Even in the same organ differences exist in their form, interlacement and connection. Of this, we have one illustration in the stomach, the cardiac portion exhibiting an appearance totally different from the pyloric; and another, in the small intestine, the upper portion being easily recognized from the lower, by the forms constituted by the capillaries. Although we cannot always prove a difference of function, where we can show a difference of form, nevertheless it is interesting to observe any peculiarity of structure which is definite and constant; and even if we cannot at present point out any practical benefit resulting from the exhibition of the fact, still, the demonstration of the arrangement of the capillaries in any special organ of the body will have its value to the student of Microscopic Anatomy.

The mucous membrane of the Appendix Vermiformis differs very materially from that of the Colon in the arrangement of its capillaries, as will be seen by the accompanying drawings.

When the mucous membrane of the colon is properly injected and deprived of its epithelium, it is regularly studded with mucous crypts or follicles of Leiberkuhn, which are very much of the same size and shape; the orifices are formed by a poly-

gonal ring of one or two capillaries, which gives the whole surface an appearance very similar to that of ordinary coarse lace. (Fig. 1.) The depth of these crypts is sufficiently great to render the term tubule applicable to them, and unless the epithelium is carefully removed from these tubules by washing, or the preparation dried, so that the epithelium becomes transparent, the capillaries forming the parietes of the crypts or tubules are not evident. The regularity and number of these crypts are sufficient to render the colon distinguishable from the stomach, although numerous high anatomical authorities state that no difference exists between the mucous membranes of these important organs; but when we accurately consider the forms of the orifice, the depth of the crypt, together with the arrangement of the capillaries forming the orifices of the crypts, and the intervening spaces, the difference between the mucous membrane of the stomach and the colon will become evident even to the superficial observer.

The Appendix Vermiformis exhibits a different arrangement of its capillaries from the colon, (Fig. 2.) the crypts are variable in size and shape, and the distances between them are by no means uniform. The interstices between them are formed by a beautiful interlacement of capillaries which presents an extremely regular appearance.

[The same observer has described the anatomy of the mucous membrane of the stomach in the Amer. Jour. of Med. Sciences for Jan. 1851, accompanied by an illustration of the different appearances of that membrane in the cardiac, middle and pyloric portions. The following is his description:

"The surface of the mucous membrane presents different appearances in different portions of the stomach; this fact not having been sufficiently appreciated by observers, we consider as one of the sources of error in the ordinary descriptions of this organ. By far the larger portion exhibits various modifications of the honeycomb structure, the cells are large and polygonal in some parts; in others, they are smaller, deeper, and rounder; the ridges between these cells are formed of one or more convoluted capillaries, and this arrangement of capillaries is particularly evident in the rugæ. The walls of these cells or pockets are formed of a network of capillaries, which subdivides each cell into smaller ones; these cells are what are ordinarily called the orifices of gastric glands, and the subdivision in the bottom of each cell corresponds

with the described orifices of tubuli. In the antrum pylori, the structure is modified, the ridges between the cells become larger, more elevated, and as we approach the pyloric orifice, *conical villi* make their appearance; these villi are more numerous and larger towards the pyloric valve, so that fewer of the angular or polygonal cells are visible in their interstices; they are not so large as the villi of the small intestine, but in other respects their external appearances are precisely similar. When well injected, they seem to be composed of capillaries, closely united by a basement membrane, and forming a pyramidal projection.

There may be said to be three different appearances presented by the microscopic examination of the injected capillaries of the mucous membrane of the stomach when deprived of its epithelium. First. The convexity of a large ruga will have a comparatively smooth and even appearance formed by convoluted and intertwining capillaries. Second. Any other portion excepting the antrum will exhibit cells or alveoli of different sizes and shapes, separated by ridges of various thicknesses, and these ridges are composed of capillaries arranged in the same manner as in the rugæ. Third. In the antrum pylori there are *conical villi*, and cells exist in the interstices and at their bases.

That the main point which we wish to prove may be understood in a few words, we would simply state that we consider the capillaries arranged in the form of 'ridges, cells, and *villi*.' The question may now arise whether this description in any manner deviates from those ordinarily given in the standard works of the day? We consider that it does, particularly with reference to the villi, the existence of which, in the stomach, we wish fully to establish by description and demonstration. It might be asked whether the term *villous* has not consequently been used with reference to the mucous membrane of the stomach? Unquestionably it has, though in a vague and loose way, as indicating a smooth, velvety surface; but not as implying a vascular, papillary projection to which the term *villus* is applied in the intestine."

The variety of opinions that have been expressed in relation to the appearance of the mucous membrane of the stomach has probably arisen from the fact that observers have either failed to inject the mucous membrane, or, what is more likely, have contented themselves with the examination of a *portion* of the stomach only, and have taken that as a type of the whole. Hence we find one author describing it as composed of cells or tubules, and another of villi. To Dr. Neill is due the credit of having first pointed out its varying condition in different portions, and the existence of these "gastric villi."

In regard to the *functions* of these different portions of the stomach, we hazard the opinion that the cardiac portion, where the polygonal cells are most abundant, is mainly intended for

the secretion of the *solvent fluid*, the gastric juice; whilst the pyloric portion, in which the *gastric villi* are most abundant, is destined for the *absorption* of such portions of the food as having been reduced to a fluid condition, and possessing the proper degree of tenuity, are enabled to pass into the blood vessels by endosmose; the main object of the villi in this position, being to afford a more extended absorbing surface. That they are not concerned in *chylous* absorption would seem to be proved from their not containing, or communicating with, any chyliferous vessels, from there being no mesentery attached to the stomach, and, of course, no mesenteric ganglia. This view of the function of these portions of the stomach would seem to be supported by the fact that a species of hour-glass contraction of the stomach is sometimes seen to occur, dividing the cardiac from the pyloric portion, the cardiac end retaining the undigested portion, while the fluid materials are passed through the narrowing into the pyloric extremity.* In regard to the question of absorption by the veins of the stomach, it is the opinion of many physiologists, that all thin solutions which require no elaboration, all substances fluid at the temperature of the stomach, and those that are soluble in its secretions, may pass at once into the mass of blood by the physical process of endosmose.† It will at once be seen, therefore, how admirably the villous arrangement of the mucous membrane of the pylorus is adapted to this end by presenting so large an absorbing surface in so small a space.

F. G. S.]

Case of Prolapsus Iridis. By G. R. Morehouse, M. D., Philadelphia.

James Mahoney, æt. 19, on the morning of Dec. 4th, while engaged at his occupation of sail making, received a severe injury of the cornea in the following manner. In attempting to pass his needle through a tense seam of sail-cloth, it slipped from his grasp and was thrown by the recoil of the seam against the cornea of the right eye, penetrating it midway between its

*Muller's Phys. Vol. I. pp. 550. Beaumont, p. 113. Carpenter's Principles of Physiology, p. 490. Magendie, p. 290.

†Blondlot, Traité Analytique de la digestion.

centre and external border. The needle was almost immediately withdrawn from it position, by its own weight, aided by the movements of the patient. About two hours after the occurrence of the accident, I saw the case for the first time; the patient then complained of moderate pain, intolerance of light and excessive lachrymation. Upon examination it was found the needle had cut its way through the membrane of Descemet, as well as through the cornea, making an incision of about one-eighth of an inch in length, very nearly in the line of the transverse axis of the eye. A great portion of the aqueous humor had been evacuated and still continued to ooze from the opening when the head was placed in a favorable position. A fold of iris was protruding, forming a flat triangular projection, the base of the triangle coinciding with the line of incision, and its inner boundary being formed by the pupillary margin of the iris; it was between the two layers of this free border that the aqueous humor continued to escape. The pupil was much elongated, its external margin terminating in the point where the fold of the iris protruded through the cornea. The color of the projecting portion was not sensibly different from that natural to the iris of the right eye. The iris of the left eye could not be compared, having been darkened by previous disease. As might have been anticipated, from its color remaining unchanged, the protrusion was found, upon examination with a pocket glass, but slightly congested, probably owing to the line of incision corresponding in direction with the course of its principal vessels.

Under the circumstances which this case presented, the indication was evidently to restore the iris *whole* to its natural position, if possible, and if not, to snip off the protruding portion, preferring an enlarged and irregular pupil, rather than opacity of the cornea with synechia anterior, which would have inevitably resulted, had the iris and cornea been permitted to remain in apposition. To aid, therefore, in the reduction, as well as to prevent further effusion of the aqeuous humor, the patient was put upon his back, and with the hope of producing dilatation of the pupil and consequent retraction of the protruded iris, a solution of the active principle of belladonna in the following propor-

tions was applied, by means of a camel's-hair pencil to the conjunctiva of the injured eye:

R. Atropiæ Sulphat, gr. v.
Aquæ distillatæ, f.ʒj.

The iris, however, being deprived of the support of the aqueous humor, did not respond so markedly as is usual, to the action of the atropia. It was therefore thought necessary to repeat the application, and in this instance it was made to both eyes with much increased affect. Cold water was also permitted to drop on the iris—to reduce the size of the protrusion as much as possible. Under this treatment, the iris, in half an hour from the first application, had entirely withdrawn itself within the orifice, and resumed its natural position, the lips of the wound in the cornea were pressed together and their edges touched with nitrate of silver. The patient was ordered to remain upon his back—but lest he should fail in doing so, the extract of belladonna reduced to the consistence of honey was smeared over the eyelids and about the orbit, to keep the pupil continually dilated.

On the morning of the next day, the wound was doing well; the photophobia was very slight; the patient, however, complained of pain in the temples and about the orbit; the change in color of the reduced portion of the iris was more marked than at first. An active cathartic was prescribed to counteract the tendency to inflammation. In the evening—the pain was less severe, the bowels had been copiously moved. On the following day all the symptoms were much improved, in the iris the incision the cornea had healed, the difference of color was much less marked, and the pain had entirely gone. The patient recovered in a short time, the functions of the iris remaining perfect, and the cornea free from opacity.

Remarks on California. By G. R. B. Horner, M. D., U. S. N., late Fleet Surgeon, Pacific Squadron.

(Concluded.)

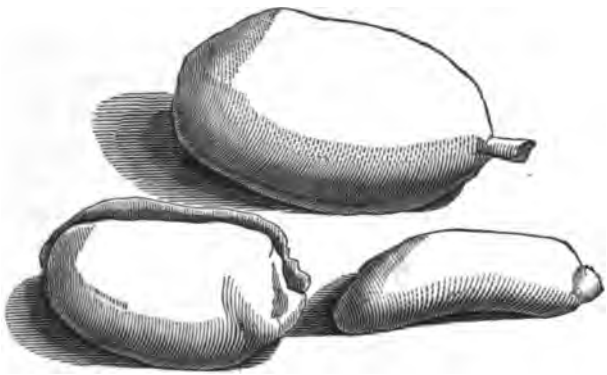
From what has been said of the country near the rivers, and the climate, the reader must infer that miasmatic fevers, rheumatism, pulmonic diseases, and others incidental to cold and moisture abound. The former complaints prevail in summer, the latter in the latter part of the fall, the winter and early part of the spring. The fevers are mostly intermittents of the tertian and quotidian types, and severe remittents. These prevail principally along the largest rivers, and are exceedingly common on the Sacramento, and in the town of that name which stands upon its eastern bank at its junction with the American, and was completely inundated by the overflow of the river last winter. The banks then sloped backwards; the dykes formed were insufficient to keep off the water—it ran around the back of the town—was eight to ten feet deep in some places, and drowned a number of the inhabitants. In July I saw several of the boats used for transit between their houses still lying upon the ground behind them, and among the majestic oaks which shade the banks and rival in height the noble sycamores, which overhang the river, and the numerous vessels anchored along its margin. Among the multitudes of emigrants in California, the typhoid fever, phthisis pulmonalis, scurvy, diarrhœa and dysentery prevail, but the last is most fatal, and has had numerous victims. When conjoined with scurvy it is very fatal. The most severe cases of dysentery, I met with at San Francisco; and in the post mortem examination of one at the city hospital, owned by its able superintendent Dr. Peter Smith, we found the most intense inflammation, with ulceration extending the whole length of the alimentary canal.

Another similar case was under treatment. The nitrate of silver in large doses, even to the amount of 10 and 15 grains, was the principal remedy employed. I understood from him, that he likewise used for the cure of that complaint, and intermittent, the kernels of the Cedron,* a fruit obtained at Panama.

*Some account of this fruit, with its therapeutical uses, will be found in the "Record" of this number.—Eds. Ex.

They are an inch and a half long, bi-lobed, brown externally, white within, intensely bitter, and contained in an oval pod.* He

No. 1.



No. 2. No. 3.

gave them scraped, in the dose of 10 or more grains, and thought them equally as efficacious as quinine. The cedron has great celebrity, among the people of the Isthmus, for the cure of snake bites; and he states that they carry it about their persons, to have it in readiness for immediate use when needed. Dr. Smith gave me a number of the kernels and one entire pod, which I brought home for distribution. While crossing the Isthmus I would have been pleased to find the tree which yields this valuable medicine, but I was unable to obtain any accurate description of it, or of the places where it grows. We may, however, be able, after a time, to learn its history, through some of the many travellers passing Panama.

On board the Savannah a number of scorbutic cases occurred while she laid at Saucelito, four miles from St. Francisco. Other cases occurred in the Ohio while there, and several in different vessels of the squadron. Those in the Savannah happened last December and January, and were ascribed not more to the want of vegetable food, than to the constant dampness and chilliness of the air, which induced perfect torpor of the skin, suppressed all perspiration, and induced livid blotches upon it by stagnation of the venous blood. Small dark red specks, like flea-bites, on the lower extremities, swelling of these, and

* No. 1. The pod of the cedron. 2. The two lobes stripped. 3. A side view of one of them.

severe pains in the joints, were other prominent symptoms. Soreness of the gums was another, but in only two instances was it severe. In one of them they became fungous and swollen to a great size. Death occurred only in one case, that of an old marine, who had scurvy joined with dysentery originally acquired during a campaign in Mexico. Not aware of this fact and of his liability to that complaint, I treated him for scurvy after the ordinary manner, allowed him lemonade, apple-water, vegetable diet and bitters, and in this manner probably brought on the dysentery. In the treatment of the scurvy, in conjunction with regimen, the extract of cinchona and gentian, and sulphate of quinine were beneficially used. Warm bathing, frictions of various sorts, poultices, alum, solutions of the sulphate of zinc, and the muriated tincture of iron, were other remedies employed; the last one internally, the others for various local affections of the limbs and mouth. To reduce the swelling of the gums scarification was indispensable. Warm clothing was worn and other comforts allowed the patients when they could be procured. But the supply of fresh provisions was very imperfect, few could get more than dried apples, some wild water cresses and potatoes to eat, and none had the benefit of a hospital of any kind. Our government owned none: private ones were located in the chief towns, but the charges were enormous, accommodations bad, and temptation to desertion so strong that our men could not be trusted out of the ships. I made many fruitless endeavors to get a naval hospital afloat or on shore. Benicia was strongly recommended on account of its superior climate, water, fuel, convenient location, and building materials, and we hope that when labor has become reduced to a reasonable rate, that a hospital will be erected there suitable to the wants of the large naval force we shall have to keep on the coast of California. As for our merchant seamen, and many invalids on shore, they were worse off than our men, who had at least dry bedding and a shelter from the weather. Drugs and physicians were abundant in some parts, but the former were so dear and bad in many places, that patients had to choose between sickness and starvation, and often to prescribe for themselves. Hence, among other instances, I met with a very respectable citizen who had the scurvy, who asked my advice, and on examination was found with his legs covered with slices of raw pota-

toes held on by bandages. When asked if he thought the former had been of service, he said he thought they had, as they had *become black.* I expressed my doubts on the subject, and recommended he should apply the potatoes internally. In numerous other instances I was called on to prescribe privately, and in several for surgical complaints. Of the latter the most important was that of a young emigrant, who had dislocated his right arm six months previously while on his passage around Cape Horn. He was very anxious to have the bone restored to its place. I made several attempts for this purpose, with and without pullies, but, as he was informed of the risk he ran of having the axillary artery torn, he became afraid of any more attempts being made, and went up to the mines to seek his fortune, crippled as he was.

In coming home I met with two other emigrants who had been injured, one had blown off a thumb in firing a pistol, the other had been knocked down, robbed, and had broken his right thigh bone, for the cure of which he had paid a thousand dollars, and yet had it shortened an inch and a half. In a third case, the patient had had a portion of the bones of the right fore-arm blown off by the accidental discharge of a gun, and had been obliged to suffer amputation on board one of the ships of the squadron, to which he was brought for treatment. In a fourth instance I went two miles ashore to hold a coroner's inquest, on the body of another young emigrant, Thomas S. Davidson, of New Orleans, who had gone out to chop wood and shoot game; but so far as we could ascertain, he had shot himself accidentally when loading one barrel of his gun, while the other was charged. We came to this conclusion from finding a ramrod some feet from the gun, one of the barrels discharged, and the fatal wound extending obliquely upwards through the anterior part of the thorax, from the left to the right side, and in the direction a gun is held when being loaded. His hatchet was found beneath the branches of a low widely-spread horse chesnut which he had chopped in eight different places; and his body lay prostrate on a lawn about twenty yards distant. Convinced from these circumstances that he had come to his death accidentally by his own hands, and that his brother huntsmen, who had their tent pitched in a neighboring valley, were free of all suspicion of being concerned in his untimely end, we had him wrapped in one of their blankets, and buried in a grave dug by our boat's crew on

the spot. My worthy companion, Lt. Leroy, and myself then returned to the flag ship, and made an official report of the inquest to Commodore Jones. Many more unhappy incidents, similar to those mentioned, have occurred in the country, and when we take into consideration the great number of our countrymen and others who must suffer from like accidents and from disease, it must seem incumbent on us to provide for them the means of being relieved, and above all to prepare for the indigent, hospitals well built, and furnished with all the necessaries calculated to restore them to health, or add to their comfort as long as they live. For adult males there were hospitals at St. Francisco, Benicia, Sacramento, and Marysville. In the city hospital of the first place, $4 per day were paid by the corporation for every public pauper, and in the marine hospital patients who have not paid the capitation tax of $2, are charged $28 per week. In all other hospitals known to me not less than $5 a day were charged, and in that of Benicia, owned by Dr. Peabody, $10 a day were paid. But in all California I do not know of a single hospital, public or private, where a child or a woman could be, for any price, provided with proper attendance and even ordinary accommodations, and the recent destruction by fire of the city hospital at St. Francisco, will occasion still greater suffering among invalids of every description, but especially to those affected with cholera, which has just made its appearance in California.

CLINICAL REPORTS.

Summary of the Course of Demonstrative Surgery in the University of Pennsylvania, from December 14, 1850, *to January* 18, 1851. (Reported for the "Examiner.")

In continuing our Report of the cases and operations presented to the Medical Class of this Institution, (see No. 1, Jan. 1851, of this Journal,) the general arrangements of the course should be borne in mind. Its object is to increase the experience and practical

knowledge of the student, by presenting him with cases of marked interest, either in diagnosis, pathology, or practice. No attempt is therefore made to show a number of patients, experience having proved that one or two operations, together with the remarks on the peculiarities of important cases, is more than sufficient to occupy sixty minutes, the period alloted each day to this portion of the course of Demonstrative instruction.

For the study and examination of the ordinary cases of surgery, an opportunity is afforded in the Dispensary of the Institution, where abscesses, ulcers, varicose veins, ophthalmiæ, &c., are sufficiently common. From the number of cases there collected, and from the private patients of the Lecturers, those shown to the class on Wednesday and Saturday, are selected, with a special view to their practical value. But as the readers of a journal may justly expect more than a detail of matters, which though highly useful to a student, could not possibly be so to a practitioner, such cases have been culled from those shown since the last report, as seemed most worthy of note, as well as illustrative of the value of this kind of instruction.

Case of Molluscum Contagiosum—Amputation.

In our last report, reference was made to an old lady who had labored under a disease believed to be Molluscum, and from whose arm two of the tumors were removed. Having now recovered fully from that operation, she was again brought forward by Dr. Smith, in consequence of a change in her symptoms, which required further treatment. The arm above the elbow was now perfectly sound; the axillary glands and lymphatics healthy: the patient's digestion, &c. good, but she had been much exhausted by hæmorrhage, consequent on sloughing in the ulcer below the elbow. She now showed no signs of disease elsewhere; but the whole fore-arm was so involved in the tumors, and in the sloughing ulcer at its upper third, that little or no hope of the recovery of the usefulness of the limb, was entertained. As the sloughing had also opened the veins at the bend of the elbow, and the ulcer extended around two-thirds of the fore-arm, Dr. Smith stated, that a consultation had decided that amputation furnished the best means of arresting the disease. Accord-

ingly, after perfect etherisation (by the anæsthetic mentioned in our last report,) the Doctor removed the limb above the elbow, by the ordinary circular operation. During its performance, as well as throughout the dressing, the patient remained, as she subsequently stated to the class, unconscious of all that was done. No bad symptom followed, and the stump was sufficiently healed in fourteen days, to enable her to return to her home.

On an examination of some of the tumors, by the microscope, Dr. Joseph Leidy found that they presented numerous nucleated cells, with encephaloid matter so intermingled with fibres, &c., as to leave but little doubt of the malignant character of the disease.

Fungus Hæmatodes of the Thigh.

On the renewal of the course, after the vacation of Christmas, Dr. Horner presented a gentleman laboring under a fungous tumor on the outside of the thigh, just above the knee. This tumor had commenced in a very unsuspicious manner, about eighteen months since, but had lately rapidly increased and now presented well-marked characteristics of the medullary fungus of Müller. An operation was theretore left for further consideration.

Calculus in the Bladder—Operation of Lithotripsy.

Dr. Horner also presented (January 4th) a patient laboring under Stone in the Bladder, which had existed several months. After detailing the history of its formation, &c., the Doctor introduced Heurteloup's instrument, and immediately seized the stone, on the right side of the bas-fond of the bladder. After crushing it three times, he withdrew the instrument, the patient exhibiting so little inconvenience, as to be able to return to his home. In the previous soundings of this patient, little sensibility was shown, and it was, therefore, not thought necessary to etherise him. During the operation and up to this date, he has suffered no further trouble than that arising from the lodging of a fragment in the prostatic portion of the urethra, from which, however, it was readily removed and returned into the bladder.

At the same time, Dr. Horner removed several large nasal polypi, by means of the wire ligature of Physic, and double

canula of Levret. These polypi were of the soft or moist kind—consisted of a moist, homogeneous tissue, covered by a thin process of mucous membrane, and contained in their cells a mucous or sero-mucous fluid, which, on being evacuated, left only the mucous, or skin-like covering.

Patients suffering from Carbuncle, Scirrhus of the Tonsils, Fracture of the Olecranon, Encysted Tumors, &c., were presented and treated between this and the next date, but offered nothing worthy of general notice.

Amputation of the Thigh.

On the 11th of January, Dr. Smith brought forward a patient laboring under a disease of the knee, which was believed to be scrofulous in its character. Two years since, this patient had fallen, whilst running, and struck his knee against the curb-stone. Violent inflammation ensued, accompanied by swelling around the joint, and followed by extensive suppuration in the ham. After some months, finding himself no better, he entered the Pennsylvania Hospital, where he remained five months, but left the institution uncured. He was then treated at his home, until April, 1850, when he entered the St. Joseph's Hospital, a new institution, in the northern portion of the city, under the care of the Sisters of Mercy. The leg was then bent nearly to a right angle with the thigh; a long, superficial ulcer existed in the ham, and extension of the limb could not be accomplished. His general health was also much impaired, and the discharge from the ham was disposed to burrow beneath the fascia. Under constitutional treatment and the use of Stromeyer's splint, the leg, however, was gradually extended: the ulcer healed with the exception of a small spot, and he was enabled to walk about, with the splint and the aid of his crutch. In July he left the Hospital and returned home; soon after which he had a return of swelling in the knee, for which he was advised to consult a great "knee-doctor," by whose direction the splint was removed, and stimulants applied around the joint. It is hardly necessary to say, that he soon got worse. The leg resumed the flexed position; suppuration again became free in the ham, and an abscess, believed to be exterior to the joint, opened in front, and on the side of the patella: hectic fever became developed, and

being exhausted in body and mind, he determined to seek relief in amputation.

On a careful examination of the limb, the operation was deemed advisable, and after etherization, Dr. Smith, assisted by Dr. John Neill, removed the limb a few inches above the knee, by three circular sweeps of the knife, inclined obliquely upwards, so as form a hollow cone, of which the end of the bone was the apex; the first through the skin, which was forcibly retracted—the second through the first layer of muscles, also retracted—and the third down to the bone, as recommended by Alanson, and often practised in France in this amputation. On uniting the flaps, the stump appeared to be well formed and adapted to receive the artificial limb which the patient purposed to wear on his recovery. On dissection of the parts after the operation, the skin of the ham was found to be firmly adherent to the tissue beneath by cicatrices; the cellular structure indurated and infiltrated with lymph, cutting not unlike scirrhus; the tendons of the biceps, semi-membranosus and semi-tendinosus, were adherent to the surrounding parts, and the inflammation developed in the ham, had penetrated the joint from behind. The synovial capsule was dry and thickened, but without ulceration or disease over the cartilages, while the crucial ligaments and sides of the condyle at their origins, were so soft as to yield to the action of the forceps with great facility. The stiffness was therefore evidently the result of external inflammation, which had travelled into the joint from behind, and would probably have resulted in cartilaginous ulceration and bony anchylosis, if hectic had not previously destroyed the patient.

Scirrhus of the Penis—Amputation.

After this case was removed, Dr. Horner brought forward a patient suffering from Scirrhus of the Penis. From previous treatment in the Blockley Hospital, the progress of the disease had been from time to time arrested, though not more than one-fifth of the penis remained. The bulb and corpora cavernosa were now indurated; sloughing had destroyed the urethra nearly to this point, and the patient suffered constantly from pain, excoriation of urine, ulceration, &c. As the inguinal glands had never been affected, and his general condition required that some effort should be made to remedy the state of

the parts, Dr. Horner determined to remove the crura of the penis and bulb; separate the scrotum by a middle vertical incision, and thus form a canal from the pubis to the inferior extremity of the scrotum through the latter. Accordingly by a V shaped incision, the base downwards, he removed the remains of the organ; arrested the hæmorrhage, which was by no means severe, and thendividing the scrotum in front, at the raphè, formed a sort of vulva out of its two sides. The patient is now, (Jan. 20th,) doing well; the ligatures have separated; his urine has been passed through the wound, and the latter gives promise of speedy healing.

Large Hydrocele, simulating Hernia.

On the 18th Jan., Dr. Horner brought forward a man laboring under a large scrotal tumor, which extended up within the internal abdominal ring. About three inches below the external ring there was a partial contraction in the swelling, and then the tumor enlarged in a conical shape to the bottom of the scrotum. The patient stated that the complaint had existed two years; first showed itself after a strain, and then gradually increased. It had never disappeared. Fluctuation was distinct throughout it; there was no gurgling; coughing created a marked motion in the whole tumor, even to its base, and a careful examination by the candle (transmitted light) showed it to consist of some dark or thickened substance. No light could be seen through the tumor at any point, and placing the patient on his back caused no change in its size. The diagnosis of the consultation was, therefore, hernial protrusion of intestine at the upper part of the tumor, and hydrocele with a thickened tunica vaginalis below. As there was however a possibility of the whole tumor being a hernia, it was decided to open it, layer by layer. This was accordingly done by Dr. Horner, by a careful dissection, until a thickened serous membrane was reached, lying just below a strongly developed cremaster muscle. On making a minute puncture, a small portion of fluid escaped, but it was quite sufficient to relieve the tension of the tumor and render the existence of hydrocele at this point certain. The sac therefore was punctured by a trocar and canula, and fully three pints of dark fluid drawn off, of about the color of a strong infusion of

black tea. The whole tumor then disappeared. Thinking that the hernia might have been returned, the patient was placed in an erect position and directed to cough, but without causing any hernial protrusion. Finding something unusual, and fearing to inject the cavity if it opened or was connected with the belly, the Dr. introduced a long probe, through the canula, through the external ring and through the internal ring, two and a half inches, where its further passage was arrested, thus establishing the fact that the patient labored under a large hydrocele, which following the course of the cord through the inguinal canal, had been arrested by the reflection of the lining of the abdomen, and thus acted on, by the motion of the bowels, in coughing. Lest too violent an inflammation should be created by injecting so large a cavity, the parts were irritated by the pressure of a probe roughly moved around the tunica vaginalis, and the patient was directed to report himself as soon as the fluid collected again.

In connection with the peculiarities of this patient, Dr. Horner stated, that he had only once met with any thing analogous to the condition of parts just explained. This was in a gentleman who had visited the city several years since, in order to place himself under the care of Dr. Thos. Harris, U. S. Navy, now Chief of the Medical Bureau at Washington. This patient also had a large tumor in the scrotum about the size of the present one; but pressure from below readily diminished it one half, and the same effect was produced by placing him in the recumbent posture, the fluid passing up into the left iliac region. Being satisfied that it was a large hydrocele communicating directly with the interior of the pelvis, Dr. Harris punctured it, drew off about half a gallon of serum, and leaving a catheter in the cavity of the tunica vaginalis, induced inflammation without injecting it.

Patients suffering from a bursal tumor in the patella; from stricture of the œsophagus (boy æt. 10,) and from fistula in ano, were also shown and operated on, in the usual way. A singular case of deafness arising from a modification in the shape of the external meatus; a case of very bad hæmorrhoids with prolapsus, and some others, were also awaiting treatment at the close of the hour, and will be reported on a future occasion.

Clinic of Jefferson Medical College. Service of PROFS. MÜTTER and PANCOAST. Report furnished by C. W. Hornor, M. D., Senior Clerk of the Surgical Department.

TRUE ANKYLOSIS OF KNEE.

(Concluded.)

Treatment.—From what I have already told you, it must be obvious that the treatment will vary essentially in our attempts to cure ankylosis. In the true or complete form of the affection, where the union is cartilaginous, bony, or composed of short and dense bands of fibro-cartilaginous, or ligamentous tissue, attempts have been made to establish motion by the application of a machine of sufficient power to break up, either suddenly, or by degrees, the cause of the defect; but invariably have these attempts resulted in a failure to accomplish the rupture of the bond of union, or where this has been effected, in acute inflammation of the part with all its usual effects, and sometimes in the death of the patient. Louvrier, of Paris, is the last of those who advocate this plan of treatment, (which had long before this date been practised by Lafond, Hildanus, and others, in false ankylosis,) but the unfavorable report of the "Academy" relative to his success, will be sufficient to consign his measure "to the tomb of all the Capulets."

In striking contrast with this operation of Louvrier, are those for the same affection introduced by Dr. J. Rhea Barton, of Philadelphia. I do not hesitate to assert, that the age has given birth to nothing more brilliant, more profoundly philosophical, more eminently useful, or better calculated to shed lustre upon our science. Two plans of relieving the deformity from stiff joints have been proposed by Dr. Barton. In one, the establishment of an *artificial joint* is the object in view. In the other, *the removal of a portion of one or more of the bones involved, by which a limb flexed at any angle may be made straight.* That a false joint might be established by first cutting through a bone, and then keeping up motion between its divided ends, was a point fully established by the experiments of different surgeons, especially Chaussier, Köcler, Sir A. Cooper, and Larrey, and also by the success which had followed the excision of joints,

in cases of caries, &c., by Park, Moreau, and others; but Dr. Barton was the first to propose the application of the principle in the treatment of ankylosis. The manner of performing the operation will, of course, vary in each case; in one it may be proper to carry the incision through the original joint; in another through the bone immediately above or below it. In the first case of Dr. Barton's, that of a sailor, in whom the hip joint had been injured by a fall, and which was characterized by great deformity, the latter operation was performed, the femur being sawed through "at the lower part of its cervix, a little above its root." This plan should always be preferred when practicable, especially where the ankylosis has been the result of previous ulceration in the joint, inasmuch as we avoid by it the risk of exciting anew the disease in its original seat. When the operation succeeds, the false joint may resemble, to a certain degree, an original one, not only in its functions, but also in its anatomical characters. The bones, for example, are tipped with cartilage, and covered with a layer of condensed cellular tissue, which strongly resembles synovial membrane; but usually, instead of this, the bones are united to each other by ligamentous matter, so flexible that it yields to the contractions of the different muscles surrounding the joint, and thus the limb becomes subject to the will, and is almost as useful as before the destruction of its original articulation.

But although this operation of Dr. Barton's is one of the most ingenious and beautiful in surgery, it must not be performed in every case, and without deep reflection. In the first place, it is unquestionably a hazardous procedure, and subjects the patient to great danger; and in the second, it is liable to be followed by a return of the defect, bony matter being sooner or later deposited in the connecting medium. I cannot do better, however, than give you the advice of Dr. Barton himself. This operation he states, is justifiable only under the following circumstances, viz:

"When the patient's general health is good, and his constitution is sufficiently strong; when the rigidity is not confined to the soft parts, but is actually occasioned by a consolidation of the joint; where all the muscles and tendons that were essential to the ordinary movements of the former joint are sound, and not incorporated by firm adhesions with the adjacent structure;

where the disease causing the deformity has entirely subsided; where the operation can be performed through the original point of motion, or so near it that the use of most of the tendons and muscles will not be lost; and finally, where the deformity or inconvenience is such as will induce the patient to endure the pain and incur the risk of an operation."

An operation similar in principle to this of Dr. Barton's has been performed, according to Professor Samuel Cooper, by Mr. Anthony White, of London.

The second method of operating proposed by Dr. Barton, is intended for the relief of those cases in which, from the size of the joint, and the shape of the limb, it would be hazardous or impossible to attempt the establishment of an artificial joint. So far it has been limited to operations upon the lower extremities; but in deformities of the upper it would be equally useful. The case operated on by Dr. Barton, a report of which you will find in the American Journal of the Medical Sciences of 1838, was one of bony ankylosis of the knee joint, attended with great angular deformity, the leg forming nearly a right angle with the thigh.

The operation consisted in first exposing the femur just above the patella by a triangular incision, the base of the triangle resting upon the front of the thigh; then removing from it by means of a small saw, a wedge-like piece, and finally, in gradually bringing the limb down, by a double inclined plane, the inclination of which could be varied at pleasure to a straight position, and retaining it there until union took place. In order to protect the popliteal artery, and also to steady the fragments by the interlocking of the asperities of each, the incisions with the saw were not carried entirely through the bone, but terminated within a few lines of its posterior surface. The solution of continuity was then rendered complete by an attempt to bend the bone, which caused, of course, the fracture of that portion which had not been divided with the saw. The operation was perfectly successful, and is precisely similar to the one you have just witnessed.

Either of these means is vastly preferable to the *excision of the joint*, advised by some, as well as to the "amputation de complaisance," recommended by certain French surgeons.

Neither excision of the joint nor amputation, two of the most dangerous operations in surgery, should be performed for the removal of what is merely an inconvenience, and my advice is this, refuse to the last any entreaty of the patient, who may urge the performance of them upon you.

In those cases of *false ankylosis* of the knee in which *sublux-ation of the tibia has gone so far as to forbid any attempt to relieve their defect for fear of produciny complete luxation, the operation of Dr. Barton might be performed, and the case of William Blakely will, at a subsequent period, be treated in this manner.*

We come next to speak of the treatment of *false ankylosis.* And here, before undertaking the management of the case, or giving our prognosis, it is absolutely essential for the proper remedies to be applied that a correct diagnosis should be formed. When the stiffness of a joint is evidently the result of *rest,* no previous disease of its various constituents having occurred, the difficulty may generally be removed by passive motion, frictions with oleaginous substances, electro-magnetism or galvanism, the vapor bath, fomentations of various kinds, hot mineral baths, especially those of Virginia, and finally, in bad cases, by the use of an instrument similar to that applied in the case before you. When the limb is flexed, the screw must be worked so as to separate one part from the other; when it is straight, the motions of the screw are reversed, so as to approximate them.

Fig. 4.

The disgusting practice of enveloping the part in the hot entrails of a recently slaughtered animal, recommended by Boyer and others,

I need hardly tell you, should not be resorted to, inasmuch as it is productive of no benefit that cannot be obtained by less revolting remedies. (See fig. 4, for a representation of the "screw" applied in a case of false ankylosis of the elbow.) When the joint is rendered motionless by the contraction of the skin after a burn, an ulcer, or an abscess, the treatment must be based upon the principles laid down when I called your attention to the subject of cicatrices; usually, but not universally, a plastic operation is required.

When previous inflammation of the extra-articular tissues, has given rise to stiffness, we must be exceedingly careful in our attempts to give relief, or we may cause the disease to reappear. In all such cases I employ the screw of Stromeyer, along with the remedies usually resorted to in simple stiffness from rest; and there can never be a necessity here for the knife. Should the instrument cause pain or inflammation in the joint, I at once suspend its extending action, and merely employ it as I would a carved splint, to keep the part at rest, while at the same time I order leeches, cold applications, low diet, purging, &c., and never renew extension or flexion, as the case may be, until all traces of inflammatory action have disappeared. The practice of treating such cases by an extending process is by no means a novel procedure; for we find that Hildanus, Lafond, Boyer, and others, employed machines very similar to those made use of by us at the present time. It is true, however, that much has been done by surgeons now in active practice, especially Stromeyer, Lisfranc, Blandin, Amesbury, &c., to bring this method into general notice. In this country, Dr. Detmold, of New York, was the first to recommend it; and since that time it has been extensively employed by my colleague Dr. Pancoast, myself, Dr. Chase, and almost all the surgeons in the land; and I cannot too strongly recommend it to your attention. It is by no means uncommon to find, in cases of this form of ankylosis, deposits of coagulable lymph in the cellular tissue about the joint, which materially interfere with its motions; and before a cure can take place they must be removed. To effect this, friction with unguentum hydrargyri, or iodine, local vapor baths, but, above all, pressure with adhesive straps and a bandage, should be at once employed.

When the ankylosis is dependent upon a contraction of fascia, as we see in certain deformities of the knee, ankle, sole of the foot, elbow, palm of the hand and fingers, although mechanical means may answer, still it is necessary to resort to the knife. My own practice in these cases is, to make the attempt first by mechanical measures alone—the apparatus being modified to suit the case; and should these fail to acomplish the object in three or four weeks, I then divide the fascia. The operation is very simple, and is performed with a small scalpel, which is introduced between the skin and the fascia, just as in the operation for clubfoot, and then turning it upon its edge, it is made to incise the resisting tissue from without inwards. The knife is then withdrawn, the little puncture made in the integuments closed with adhesive plaster, and the extending apparatus applied. Gradual extension may be at once commenced, but we must carefully avoid being in too great haste to effect a cure, for fear of exciting, by our efforts, inflammation. It is also highly important to commence *passive motion* in the course of a few days after the extension is completed, and to *keep up extension* for some weeks after the limb has assumed its natural shape; unless attention is paid to these two points, the deformity will almost to a certainty reappear.

Stiffness occasioned by contractions of the muscles and tendons, the result of rest, paralysis of antagonists, and sloughing, require to be treated with much discrimination. When the contraction is organic, and may be traced to rest of the joint too long continued, passive motion, the usual remedy for rigid joints, and lastly, in obstinate cases, the screw, will generally effect a cure. It is in this form of ankylosis, especially where the knee joint is involved, that tenotomy is so often employed; but the practice indicated is that which you should adopt. First try the screw; should the tendons and muscles resist for any length of time, then their division will be admissible. The operation is precisely similar to that described as the best when it becomes necessary to divide the fascia.

When, on the other hand, paralysis of one set of muscles allows another to distort the joint and produce ankylosis, it is impossible by an operation, or the use of any machine, to restore the part to its normal condition. In such cases we sometimes derive benefit from the application of the remedies supposed to

exert a favorable influence in palsy, such as galvanism, electricity, frictions with veratria and strychnia, cold bathing, &c. In recent cases I have sometimes found advantage from the application of a splint, which prevented the distortion of the limb, while the remedies for the paralysed muscles were being administered. I have also tried in one case of palsy of the extensors of the hand, a contrivance recommended by Dr. Charles Bell, and by its use prevented ankylosis, and enabled the patient to employ the member in his ordinary avocations. This machine was composed of four pieces of steel, of sufficient power to keep the fingers straight, when no effort was made to flex them, but not strong enough to resist the voluntary action of the flexors, placed along each finger, and fastened at one extremity into a bracelet around the wrist, and at the other into a common brass thimble. The fingers being inserted into the thimbles, and the bracelet fastened around the wrist, the springs took the place of the extensor tendons, and a glove being drawn over the whole, it was impossible to detect the appearance of anything unnatural.

When sloughing, or destruction of the tendons or muscles by a wound, is the cause of the ankylosis, it is of course impossible to accomplish a cure. The same may be said of those cases in which the tendons are bound down very firmly by adhesions, the result of previous acute inflammation. When gout, rheumatism, sprains, luxations, synovitis, or disease of the cartilage or bones have given rise to capsular or intra-capsular ankylosis, the treatment is very similar to that already indicated, but we must expect a much more tedious convalescence. The use in these cases, of alkaline baths, is highly recommended by certain of the French surgeons.

Finally, we should always inform the patient, that usually, in false ankylosis, it is necessary to support the limb by mechanical means for some weeks or months after it has attained its proper shape, or until the weakened muscles, fascia and tendons have regained their original tone, or at least are strong enough to prevent subsequent contraction of the part. During this period, we should employ all the best remedies for giving tone and vigor to the weakened parts, such as frictions, cold bathing, electricity, &c.; and in many cases constitutional remedies are highly important.

Pennsylvania Hospital. Medical Wards, service of DR. WOOD. *Reported by* MR. J. AITKEN MEIGS.

Wednesday, January 8th.—The following cases were brought before the class by Dr. Wood.

CASE I.—*Partial hemiplegia resulting from arteritis.*

The patient, a man of robust constitution, æt. about 50, came into the house a few days before, complaining of some difficulty of phonation. The tongue, when protruded, evinced a slight tendency to depart from the median line towards the right, and a close inspection of the countenance betrayed a marked inequality in the expression of the two sides. The right half manifested in repose a more decided degree of muscular relaxation than the left, an indication generally accompanying some form of paralysis. When told to move his right arm he did so with difficulty; and the motions of the right leg were also somewhat impaired. Here was evidently partial hemiplegia, traceable undoubtedly to some lesion or disturbance seated in the encephalon, probably on the left side.

Upon further examination, no pulsation whatever could be detected in the radial, brachial, or axillary arteries, either of the right or left arm. When the arm was compressed, however, the veins filled freely and naturally, showing clearly that the want of pulsation was not assignable to a complete obstruction of the arterial vessels. This abnormal condition was confined to the upper extremities entirely, as the arteries of the lower limbs were found to pulsate freely. The left antero-lateral portion of the neck was slightly swollen, and the venous tracts of this region considerably distended. Pulsation was manifest at the root of the carotid of this side, though none could be detected above. Over the right carotid, however, and under the sternal extremity of the right clavicle, the arterial pulse was strong and distinct.

It was evident that between this point and the axillary artery, some impediment must exist, sufficient to break the impulse of the heart, and prevent its being extended down the artery of the arm, but insufficient altogether to obstruct the flow of blood. This impediment was probably in the subclavian artery, as pulsation could be felt in the right carotid.

In like manner there was probably some impediment in the

left subclavian, affecting also in some degree the left carotid, as no pulsation could be felt in the axilla, and only a slight one near the lower extremity of the carotid of that side.

That this impediment was not within the aorta was proved by the active pulsation of that vessel to be felt at the epigastrium, and also by the pulsation of the arteries in the lower extremities.

Percussion over the upper and anterior part of the chest, both over the sternum and on each side of it, was quite clear, showing that no tumor existed in that position, which could interfere with the circulation.

There was a slight roughness of the sounds of the heart when listened to, over that organ, but by no means very distinct. At the sternal extremity of the right clavicle, the double sound was even louder than over the heart, and was attended with a very striking musical tone.

The aneurismal thrill could not be detected.

The double sound could also be heard behind, between the upper portion of the scapulæ.

Upon a view of all the circumstances, Dr. Wood gave it as his opinion, that at some former period *arteritis* had existed, producing the effusion of coagulable lymph within the vessels; and that in this way the subclavians had become partially obstructed, so as altogether to prevent the impulse from the heart being carried into the arteries of the upper extremities.

Not impossibly there might be dilatation in the arch of the aorta, upon the left, or some undiscoverable tumour, pressing upon the veins which return the blood of the left side of the head, thus accounting for the obvious venous tumefaction upon that side, and in some degree explaining the hemiplegic symptoms by the consequent venous congestion of the brain. The deficient supply of blood to the brain through the left carotid might also, possibly, have something to do with these symptoms; as the obvious deficiency of power upon the right side of the body, might result either from pressure on the nervous centres, or want of the requisite power in them from deficiency of blood.

Upon these views as to the patholgy of the case under consideration, Dr. Wood based his treatment. The main indication was, clearly, to cause absorption of the coagulable lymph coating the interior of the vessels. To this end, the great promoters

of absorption, Mercury and Iodine, would be exhibited in moderate doses. Pilul. Hydrarg. gr. i. and Liq. Iodini Comp. gtt. x. were prescribed, each four times per diem.

Case II.—A woman, aged 51, who had entered the House some weeks ago. She had been troubled with incessant vomiting, which had continued three months, causing extreme emaciation, and threatening ultimate death, from interference with the function of nutrition. She had all the symptoms of chronic gastritis; and from the extreme anxiety, and the peculiar color and expression of her countenance, when she first came under notice, suspicion had been entertained of the existence of some carcinomatous affection. The following precription—

℞. Argenti Nitratis, gr. ss.
Pulv. Opii, gr. 1-6th. M.

was immediately administered three times a day, with the happy effect of an entire relief of the symptoms. She had vomited but once since entering the house—a period of three or four weeks. Her appetite has returned, she could easily retain and freely digest her ordinary food, and was obviously gaining flesh.

Case III. The next case presented to the class by Dr. Wood, was an Italian, who had entered the house suffering from a continued pain in the epigastrium, and considerable cough. He had been sick four months; but from his inability to speak the English language, no information whatever could be obtained from him as to his previous condition. His legs were highly œdematous, pitting distinctly and deeply on pressure. When in the horizontal position a general dropsical effusion was apparent, and fluctuation of a liquid in the abdomen was made sensible in the usual way. The intestines distended with flatus, and floating on the top of the water, gave forth a resonant sound on percussion. Effusion had also taken place into the pericardium, as shown by the dulness on percusssion over the thorax. The effusion, however, was slight, as the sounds of the heart, instead of being feeble, as would otherwise have been the case, were natural in the degree of loudness.

Auscultation revealed a murmur of regurgitation during the first sound of the heart, and directly over the mitral valve. From this circumstance, Dr. Wood concluded that the mitral

valve was diseased, and allowed the blood to regurgitate during the ventricular systole. In consequence of this condition of the heart, the circulation was here impeded, and to the congestion of the lungs and of the right side of the heart, and the general venous system thus induced, was undoubtedly assignable the general anasarca under which the patient was laboring. Over the posterior and inferior portion of the right lung, crepitation could be distinctly heard; not the fine crepitant rale of pneumonia, but a sub-crepitation caused probably by the congested state of the pulmonary vessels.

The sputa were bronchitic in character; the urine had not been examined.

The patient was put upon the use of potassæ bi-tartrat. ʒj., to be taken in small doses during the day; and pulv. scillæ grs. ij. every two hours; to be diminished if it occasioned nausea. Cups were directed to be applied to the back of the chest, over the seat of the sub-crepitation.

January 12. The patient walked into the room unsupported and presented himself again to the class. The dropsical effusion had disappeared, the sub-crepitant rale was much less distinct, and he was already convalescent from his secondary affections. The abnormal sounds of the heart, however, still remained.

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Concluded.

REPORT ON MEDICAL LITERATURE.

This Report, from the pen of Dr. Alfred Stillé, Chairman of the Committee, discusses with marked ability the Medical Journalism of the United States, exposing with candor and directness its defects, while it commends what is valuable and important in the original contributions of American physicians during the past year. The committee claim, we think with justice,

no small degree of merit for our medical periodical literature, and consider American journals, at the present day, as "indispensable to writers upon the practice of medicine and surgery." An appendix to the report contains a list of all original articles of interest published during the year, forming a valuable table for reference, and one which we hope will be continued in future reports.

The remarks of the committee upon the "critical department of the medical journals" are marked by discrimination and good sense, and would be read with profit by that class of writers who figure in this department. The following high tribute is paid to the reviewers, and we shall not call in question its truthfulness:

"The 'Reviews,' as distinguished from the 'Bibliographical Notices," generally present a clear and faithful account of the works to which they relate, with occasional comments; as the opinions of the author and reviewer coincide or diverge. It very rarely happens, in such elaborate analyses, that the pen of criticism appears to be guided by improper feelings, whether of impartiality or dislike. They seem, in the great majority of instances, to be dictated by a spirit of justice, and that they are so is rendered probable by the striking unanimity of sentiment expressed in various journals respecting the same work. Exceptions to this statement may undoubtedly be discovered, yet we regard it as a fact, no less certain than praiseworthy, that the medical critics of the United States are remarkably independent in thought and expression. They display but little of that tendency so evident in British periodicals, to proportion the eulogy of a book to the reputation of its author, and to frown upon a work, however meritorious, to which an unknown name is attached. In this matter American critics unquestionably feel the influence of liberal institutions, and appear to be all but unconscious of either hopes or fears inspired by the authors whom they judge."

A catalogue of the books published in the United States during the year, accompanies the report, with short notices of each of the *original* works.

This summary of the progress of medical literature during the year, furnishes the committee with a text for some general reflections and suggestions upon the importance of a national literature to the medical character of the United States.

The causes of the imperfections of our native literature are pointed out with a clearness and a felicity of style rarely excelled. Imperfect education, deficient mental training, a vitiated language, and a "debased popular idiom," are mentioned as

prominent obstacles to the attainment of that high excellence to which American medical writers should aspire. The necessity for institutions of learning of a higher grade than any of those which now exist, is thus enforced:

"The true exponents of the literature of an epoch or profession are not the most popular works, but those from which popular works are extracted, those which are fullest of invention and discovery, those to which the historian will afterwards point as the monuments of their time. No argument need be adduced to prove that these can only be created by a system of exceptional culture above, and different from what is suited to the average wants of the profession; that there must be seats of professional learning whither all may resort who have exhausted the ordinary means of instruction and yet thirst for higher knowledge. At present, no such institutions exist in this country; and hence nearly all writers who have adorned the native literature of our science have been compelled to seek abroad the culture which they vainly wished for at home, and, as an inevitable result, to adopt opinions, and habits of expression which have tended to make their works pale copies of transatlantic originals, when they should have been stamped with the characteristics of the American mind. An elevated, distinctive and permanent medical literature cannot, we think, be hoped for until some one of our schools shall adopt a much higher system of instruction than has yet been thought of, and, instead of looking to minor institutions for the measure of its advancement, look upwards only to the sublime purpose of education, receive into its bosom those alone who are fitted by their accomplishments and their ambition to honor the profession, and resolve that the American student shall be perfected on American soil.

On such a purpose, steadily maintained, and supported by every expedient that is calculated to develop and mature the talent of those who enter upon medical pursuits, must the hopes of our professional literature after all repose, and not upon any narrow-minded attachment to American literature for its own sake merely. It is not to be pampered because it is a native growth, but to be fostered because it is good or capable of becoming so. It would ill become us to imitate the people of China and Japan, who pride themselves upon their stunted and effeminate civilization, and look with contempt upon the sciences and arts of the outside barbarians. A feeling of nationality in literature is, within just limits, a mighty stimulus to the production of works which extend the empire of the mind, but, carried beyond a certain point, becomes a high treason to the universal republic of letters, and 'confines to a sect what was meant for mankind.' While, then, every lover of his country must be ambitious of raising to its glory the only imperishable memorial that human skill can construct, a national literature, he ought to remember that the work will crumble of its own weakness, unless its foundations are deeply and securely laid in that knowledge which is of no one time or place, but is the common product of all ages, and of the whole civilized world."

The subject of an international copy-right law in its connection with the present state of American literature, is discussed with ability and perspicuity. Upon the advantage to be derived from such a law the committee remark:

"The benefits of such a law would be incalculable, springing from the one glorious consequence, that through it the thinking and therefore the governing minds of two great nations, common in their origin and language, would be brought directly into contact and fused together, strengthening one another, by communion, rivalry, and example, and would with this redoubled strength reach and maintain with ease the vantage-ground of civilization against all the world besides. Commerce may knit together nations, but only in their material interests, binding them with the bonds of selfishness; but a free intellectual commerce is the noblest of all bonds, for it knits the souls of men.

A law such as would secure the rights which we assume to be absolute and inherent, is perhaps the surest expedient that could be devised for promoting our native literature. Not only would it enable publishers to offer a fair remuneration to our authors, but it would also have the effect of causing a number of foreign works to appear first in this country; and since the sphere of influence presented by the millions of American readers is so far superior to any other, many a foreigner of genius and even of established reputation would speedily be numbered amongst our adopted citizens. Grafted thus with the strongest offshoots of the parent tree, American literature would rapidly attain a degree of luxuriance and fruitfulness, which is quite impossible under the present system of its culture, or rather neglect. But the benefits would be reciprocal; our writers would become English writers, and find an attentive and appreciating audience among a people who even now receive them gladly, and award to those who deserve it no scanty meed of praise."

Our space forbids more extended comments upon this able paper, but we cannot leave it without expressing the high gratification which it has afforded us. Whether viewed as a specimen of elegant composition, or as the vehicle of just and practical views. upon the subject treated of, we would commend it to the consideration of the profession.

REPORT ON PUBLIC HYGIENE.

This report is confined mainly to that department of hygiene having relation to epidemics and diseases, especially "the sources of typhus fever, and the means suited to their extinction." The Chairman, Dr. Joseph M. Smith, of New York, regarding the origin of typhus to be from human excretions, points out, with his usual ability, the kinds and quantities of these matters

concerned in its production. A critical analyisis of the proximate principles present in the pulmonary and cutaneous excretions as revealed by recent experiments, is presented, and to the animal matter in these is ascribed, the idio-miasma or typhus poison. The quantity of this eliminated from the entire amount of matters discharged from the lungs, taken in a given time has been proximately arrived at, by the investigations of Ancell of London. The report thus sums up the results:

"Adopting the chemical views of Liebig, and pursuing his method of research, this gentlemen has ingeniously attempted 'to exhibit the various modes in which the equivalents of the component parts of the *ingesta* are eliminated from the body, and to ascertain the elementary constitution of the solid, fluid, and gaseous compounds into which they are distributed in the *egesta.*' The subject of Mr. Ancell's experiment was a healthy man, who, in twenty-four hours, took as *ingesta* 96 oz., and received, by estimate, into the system by the lungs, stomach, and skin, 32 oz. 23 dwt. 4 grs. of oxygen, making a total of matter received into the body of 129 oz. 3 dwt. 4 grs. The weight of the individual was the same at the end as at the beginning of the experiment. The egesta during the time were found to be fæces 5 oz. 10 dwt.; urine, 42 oz. and matters eliminated from the lungs and skin, consisting of water, carbonic acid, sweat, tears, animal matter, &c., 81 oz. 13 dwt. 4 grs. in all, making a quantity equal in weight to the matters introduced into the system.

The great difference in the amount of the excretions by the lungs and skin, in Mr. Ancell's estimate, and the quantities stated by former experimentalists arises from his bringing into his calculation the amount of oxygen taken into the system through the lungs, stomach and skin, and expelled from the pulmonary and cutaneous surfaces in combination with carbon and hydrogen, forming carbonic acid and water. Subtract the oxygen in question, and the quantity of matters excreted by the lungs and skin is reduced to 48 oz. 14 dwt., a sum differing but little from the estimates given, as before noticed, by Hartman and Von Gorter.

On carefully analyzing the table in which the results of Mr. Ancell's inquiries are exhibited, it is found that of the 81 oz. 13 dwt. 4 grs. of cutaneous and pulmonary excretions, 42 oz. 13 dwt. 10 grs. consist of water, 9 dwt. of dry materials are found in the secretions of the skin, and consist of *animal matter* 8 dwt., and salts 1 dwt., which added to the *animal matter* exhaled with the pulmonary vapor, give, exclusive of the salts, 11 dwt., 7 grs.: that is, the amount of *animal matter* emitted with the excrementitious discharges through the lungs and skin in twenty-four hours. This amount probably exceeds the usual quantity, and consequently, to avoid exaggeration, we shall assume 10 dwt. as the normal daily average."

The circumstances under which the effete matters of the human body may be productive of typhus, both in private dwellings and public institutions, is a subject of exceeding interest; and is treated by the committee in an instructive manner.

The influence of over-crowded, illy ventilated rooms, occupied by filthy tenants, in the production of typhus, is also forcibly depicted, and the foul agencies thus developed are considered amply sufficient to produce the disease, without resort to the doctrine of specific contagion, although the influence of this cause is not denied in particular cases.

Many other interesting views upon the etiology of typhus are set forth, which our limits will not allow us to notice. The report, so far as it develops the one topic selected by the chairman, is a masterly production, and we have only to regret that the same mind did not take a wider range of inquiry into this neglected department of our science.

Appended to the report is a paper on the "Sanitary condition of Massachusetts," by Dr. Edward Jarvis, a member of the committee. This paper presents us with a history of the public acts of Massachusetts in reference to the sanitary question, showing that State to be in advance of any other in the Confederacy, in the care which she has extended over the physical condition of her people. It is to the untiring energy and perseverance of a few men, amongst whom the name of the writer of this report stands conspicuous, that the enviable position of this State upon the sanitary question, is mainly attributable. This fact should afford encouragement to those interested in other States, to persevere in this labor of science and benevolence.

Dr. Jarvis has instituted a comparison between the mortality of the States of New York and Massachusetts, and between the cities of New York and Boston, as revealed by the registration reports of the two States, which will be found exceedingly interesting to those engaged in such enquiries.

The comparative mortality of the cities and suburban districts of the states, is also discussed, so far as the published reports furnish the data, though it is admitted that as yet these are not sufficiently full to arrive at satisfactory results on this point.

It is inferred, however, from the facts which have been

collected, and from the corroborating testimony of the more accurate and complete returns of mortality in England and Wales, that "life is fostered less successfully in the city than in the country."

The full returns of the mortality in England and Wales, as published in the fifth report of the Registrar General, accompany Dr. Jarvis' paper, and upon them he has made some observations and comparisons which will be found valuable to the statistical student. The report closes with the following sentiment in regard to the importance of hygiene as a branch of medical science.

> The few facts that are known are, to this great subject, like the few pieces of ore or coal that the proprietor finds in an unexplored field. They indicate that much more is to be discovered, and the importance of farther examination. A sanitary survey of this and of every other State would, I fear, demonstrate an inequality in the distribution of life in various places and among various classes of people, such as few either of the philanthropists or political economists now suspect. And, when these facts shall be demonstrated, the way will be open to the discovery of many of the causes of disease and death, some of which certainly, many of which probably, can be removed, and the health of man thereby be increased and his life prolonged.

With this view we fully accord, and trust that whatever changes the American Medical Association may make in the arrangements of its committees, or in the features of its organization, it will still retain the subject of public hygiene, as one deserving of an annual examination by a competent committee.

"Report on the Hygienic characteristics of New Orleans, by J. C. Simonds, M. D.," is the title of another paper appended to the report on Public Hygiene.

Dr. Simonds has presented many facts of interest in regard to the hygienic condition of New Orleans, tending to develope sources of the ill health which prevails there, and which it would be wise in his fellow-citizens seriously to ponder.

The drainage of the city is represented as exceedingly defective, although measures are in progress which it is believed will remedy this evil in the course of a few years.

The supply of water is shamefully restricted, being "*monopolized by a close corporation* dispensing it very sparingly and at most exorbitant rates, which have this year been increased over

twenty-eight per cent. to families." The poor man, we are told, pays the same price for this necessary of life, as the wealthy citizen, though he consumes less. Dr. Simonds knows of but ONE *free hydrant*, and that in a location that renders it of but little use! Well may Dr. S. exclaim—

"How much longer our citizens will submit to this misused monopoly cannot be determined; but that they have a right, paramount to any restrictions that may be imposed by a legislature, to procure for themselves an abundant supply of this necessary of life, scarcely admits of question."

In making statistical tables of deaths, in New Orleans, Dr. S. has experienced the common difficulty of defective returns, based upon the reports of sextons, and false or ambiguous certificates from physicians of all classes, both real and pretended. He has, however, presented the profession with some novel and interesting views on the principles of classification of diseases, which are well worthy the attention of statisticians.

The mortuatory tables which accompany the report, evince on the part of the writer great care and industry, although we fear the labor bestowed on their preparation, will yield him no other return than the consciousness of having performed a public duty, and the thanks of that small band of his professional brethren who are devoted to similar pursuits. The crowd bestow no praise on such "dry details."

Report on Adulterated Drugs, Medicines, and Chemicals, &c.
Dr. R. M. Huston, *Chairman.*

The important subject entrusted to this Committee, has been faithfully investigated, and a mass of interesting facts, which would probably not otherwise have been revealed, has been the consequence. The inquiry is divided into two sections—the first relating to the adulterations of foreign, and the second to that of domestic drugs.

The late Act of Congress, in regard to the former, is said by the Committee to have been productive of much benefit—both by the actual prevention of dishonest traffic, and by stamping a practice which was once carried on with impunity, with the seal of public condemnation.

In regard to "home adulteration," which it has been feared by

some, was on the increase, since the late passage of the law above referred to, the Committee, after special investigation, inform us, that in their opinion "there does not appear to be any *increase*, but probably a *diminution* in the domestic sophistication of drugs."

The grounds upon which this assertion is made, will be found interesting to enquirers upon the subject, and the Committee deserve much credit for their industry in collecting the facts.

Many articles still subject to adulteration, are reported upon, and the profession are thus placed on their guard in relation to them.

The following are the conclusions arrived at by the Committee on this branch of the subject:

"1st. That the wholesale druggists in the large cities, equally in the South and West as in the Eastern States, who are not specially engaged in selling nostrums, either as proprietors or agents, conduct their business on fair and honorable principles. As a general rule, they buy their choice chemicals from those who manufacture them, and either import other articles, or get them directly from those who do, and are always disposed to supply good articles to customers who are willing to pay a remunerating price. At the same time, many of this class keep inferior articles, which they dispose of for a corresponding price to physicians and storekeepers who insist on buying at reduced rates.

2d. That the inferior and adulterated drugs are chiefly disposed of in the southern and western portions of the United States—to the physicians and people residing in the small towns and villages, and sparsely populated districts. That in the large cities, particularly in the Atlantic States, bad drugs are, as a very general rule, dispensed only by inferior apothecaries."

The report closes with some important recommendations in regard to the sophistication and sale of spurious drugs at home, which are specially addressed to medical societies.

Report on Indigenous Medical Botany.

This report from the pen of Dr. Eli Ives, of New Haven, is confined to the author's personal experience of the virtues of a few individual plants, not before enumerated by the preceding Committees.

The medical profession are perhaps more indebted to Dr. Ives, than any other living physician, for his researches into the medicinal virtues of native plants, and hence this report,

restricted as it is, will be found to possess much practical interest. A simple enumeration of the articles mentioned would carry us beyond our already extended limits, and we can, therefore, only commend the paper of Dr. Ives to the general perusal of physicians.

Report of the Committee on Surgery.

This paper occupies sixty pages of the Transactions, and though confined to American Surgery, takes a more extended retrospect than a single year would furnish. It is from the pen of the venerable President of the Association.

The subject of Anæsthesia occupies a prominent place in the report, and a full account is given of the experience of American surgeons within the year, both as it relates to the value of anæsthetic agents in general, and to the relative value of particular articles. Without reviewing the facts here, we can merely state that the result of the enquiries of the Committee fully confirms previous experience, as to the great importance of this new class of agents in the practice of Surgery, although a difference of opinion still exists, as to which of the articles employed preference should be given.

The subject of Cancerous Tumors, referred by a previous Committee to the consideration of this, is fully discussed, and a mass of valuable facts are spread out before the profession, touching the question of the curability of cancer, whether by operative procedures, or by remedial measures.

The results, so far as operations are concerned, are, we think, sufficiently discouraging, to deter surgeons from recommending extirpation of cancerous tumors of the breast, and other really malignant growths, as a means of cure. We would gladly transfer to our pages the experience of some of the most eminent surgeons of the country upon this point; but we must be content with recommending those interested in the inquiry to consult the volume for themselves. The subjects of Aneurism, Injuries of the Head, Gun-shot Wounds, Fractures, Hernia, Lithotomy, Ovariotomy, Excision of the Uterus, Cataract, with a variety of other facts collected by the Committee, form altogether a valuable compend of the present state of American Surgery. From a review of this able paper, we fear that the rage for operating

which prevails to no small extent, over the surgical world, to the injury of the cause of true science, is still too rife amongst American surgeons; and if we should venture a criticism on the report before us, it would be that this spirit is not sufficiently discouraged by the Committee.

With these remarks we must bring our notice of the Transactions to a close. Their strictly national character, and the strong desire that we feel to present a fair analysis of them to our readers, will, we trust, prove a sufficient apology for the length we have given to their notice. That they are, as a whole, highly creditable to the Association, and that they manifest an evident progress in Medical Science in our country, will, we think, be admitted by every candid reader. The reports of the various Committees are thorough and practical, and the spirit with which the proceedings recorded in the volume appear to have been conducted, augurs well for the future prosperity and usefulness of the Association.

A Treatise on the Diseases and Surgical Operations of the MOUTH, *and parts adjacent: with Notes of Interesting Cases, ancient and modern.* By M. JOURDAIN, Dentist and Member of the College of Surgery. *Translated from the last French Edition.* Philadelphia, Lindsay & Blakiston, 1851.

This is the title of a royal octavo volume of 444 pages, no less creditable as an increase to the literature of American Dental Surgery, than liberal and tasteful in the mechanical getting up of the book.

Mr. Jourdain's work embraces, in its minute details, both as regards the diseases of which it treats, and the careful report of numerous illustrating cases, a valuable and interesting amount of knowledge to the dentist, as also to the medical practitioner. It is one peculiarly needed, inasmuch as its matter is for the most part confined to the disturbances arising *from* the teeth, rather than *in* them, and involves a correct knowledge of the general principles of surgery and pathology, too frequently overlooked in treating of *specialities*, and not less in the management of an unhealthy mouth.

The translator of the work has modestly omitted giving his name to the public, and hence, perhaps, we may with the greater

freedom commend the talent and good judgment with which he has performed his task, not merely rendering the thoughts of the French writer into good English, but—*currente calamo*—reviewing or correcting his errors in the most important feature of the work, with such discrimination as to preclude the necessity of that duty being attempted after him. And yet, the book in its present English dress, has claims to our notice not less than to our thanks, for it is a better work than the original, and especially where the translator has made most free in pruning and adapting "*by suitable additions and corrections to the present wants of the dental profession.*"

Mr. Jourdain, however, gave evidences of extraordinary industry and minute observation of the anatomy and sympathetic organization of the mouth; and especially, considering the period at which he wrote, (about 1770,) his work must be regarded as evincing scientific views of pathology and hygiene, as applicable to the exercise of his profession, far in advance of his contemporaries. The treatment of his reported cases, proves him to have been a surgeon in whose practice as a *Dentist* we might now properly condemn the want of a due estimate of the value of the teeth, if we may judge, for instance, by the governing rule suggested in a case of tumor, where he was not suffered to operate, but where he states, that if allowed, "*I should have removed all the teeth, good and bad,* involved in the tumor."—There is great probability that the sacrifice of the *bad* ones would have proved that they alone were so involved.

With great and commendable frankness, Mr. Jourdain acknowledges that he has freely selected from the experience of previous writers, and "after all," that it is not so easy a duty as some persons think, to "make books *from books*": had he said not so easy to make *good* books from *bad* ones, the remark would have been still more correct and appropriate. But his readers of the present day, whilst giving him credit for the research and honest confession of the use made of it, would have preferred a more original work from a man evidently capable of deep thought and sound investigation.

We may safely recommend the volume as worthy of both purchase and perusal.

E. B. G.

1. *Introductory to the Course of Lectures on the Theory and Practice of Medicine, in the University of Pennsylvania.* By GEORGE B. WOOD, M. D. Delivered October 11th, 1850.
2. *Impediments to the Study of Medicine; a Lecture, introductory to the Course of Practice of Medicine.* By J. K. MITCHELL, M. D., Professor in the Jefferson Medical College. Delivered the 18th of November, 1850.
3. *Lecture Introductory to the Course of Materia Medica and Pharmacy, in the University of Pennsylvania.* By JOSEPH CARSON, M. D., Professor of Materia Medica and Pharmacy. Delivered October 10, 1850.
4. *An Introductory Lecture, delivered at the opening of the thirty-first Session of the Medical College of Ohio, November 4th,* 1850. By JOHN BELL, M. D., Professor of the Theory and Practice of Medicine.
5. *An Introductory Lecture, preliminary to a Course on the Institutes of Medicine, delivered on the 9th of October,* 1850, *before the Medical Class of the University of Pennsylvania.* By SAMUEL JACKSON, M. D., Professor of the Institutes of Medicine.
6. *An Introductory Address to the Class of the Medical Department of Pennsylvania College, Session* 1850—51. By WASHINGTON L. ATLEE, M. D., Professor of Medical Chemistry.
7. *Introductory Address delivered before the Class of the Medical Department of the Saint Louis University, Session of* 1850—51. By M. M. PALLEN, M. D., Professor of Obstetrics and the Diseases of Women and Children.

We are indebted to Professors Wood, Mitchell, Carson, Jackson, Bell, Atlee and Pallen, for copies of their Introductory Lectures delivered at the opening of the current sessions in their respective schools. All of these addresses are well-written and instructive contributions to our medical literature; several of them have a special present interest, from recent changes in the professional position of the lecturers.

That Dr. WOOD'S Introductory to his first Course on the Theory and Practice of Medicine in the University of Pennsylvania, has been received with lively interest by all who are connected

with American medicine, we need hardly say. The importance of the chair, the distinguished reputations which have already illustrated it, and the high anticipations formed from Dr. Wood's career in another station, could hardly fail to make him on such an occasion, the 'observed of observers.' We are sure our readers will be gratified by having placed before them the personal allusions with which the new professor assumed the honored mantle, to which all American physicians of every interest and association, must look with something of attachment and of veneration.

"You are aware that the professorship I now fill became vacant soon after the close of the last session, by the resignation of Dr. Chapman, whose failing strength induced him to withdraw from its onerous duties, after a career of honor and usefulness, never surpassed in the medical history of this country. In the movements which afterwards took place in reference to the filling of the vacancy, I was quite passive. An honorable ambition might suggest that the Professorship of the Practice, occupied as it had been by men so illustrious, held a somewhat more elevated place in public estimation than that of Materia Medica; and the consideration was not without weight, that in the former a new field was opened, calculated to stimulate energies and industry, which, without some fresh excitement, might perhaps slumber in the hebetude of increasing age. On the other hand, however, were the reflections, that with my existing duties I was quite familiar; that to fulfil them it was only necessary to keep up with the advancing tide of knowledge; that rest rather than increased labor was suited to my time of life, or at least soon would be; and that, in making a change, I might be abandoning a position to which sufficient trial had shown me to be in some degree adequate, for another in which I might not prove equally useful, or give equal satisfaction. The motives for a change were insufficient to outweigh those of a contrary character; and having, therefore, no personal ends to answer, I had no other wish, in reference to the future arrangements, than that they should be such as would conduce to the advantages of the school.

To my colleagues and to all others concerned, when interrogated on the subject, I freely made known these sentiments; declaring truly that I was personally indifferent whether, in the approaching election, another or myself should be chosen, that I was desirous only that the true interests of the school should be consulted, and that, not being the best judge of my own qualifications, I should take no step in the matter, but leave it altogether to the wisdom of those in whose charge the Institution was placed. Should they believe that I could best serve the school in the department of Materia Medica, I would cheerfully persevere in my former path of labor, and cordially greet any new colleague whom the Trustees might elect to the vacant professorship. Should it, on the contrary, be thought that I could do better service in the practical chair, I would

acquiesce in the decision, and exert myself to the extent of my capacity, to fulfil its various and burthensome requisitions.

Under these circumstances, the choice, as you are aware, fell on myself; and I should not be doing justice to my feelings on the occasion, if I did not confess to you that this mark of confidence was in the highest degree gratifying to me, though involving much of labor, of sacrifice, and of misgiving on my part.

And now, gentlemen, you will, I hope, be disposed to judge me leniently in my new sphere of duty; and, should the result of my efforts fall short of your expectations, or of the just demands of the position, you will at least acquit me of undue presumption.

There is another consideration, which, in justice to myself, I must beg of you to bear in mind, in forming your estimate of the ensuing course of lectures. You will necessarily compare them with the past. Even those of you who have not enjoyed the opportunity of listening to my predecessors, have yet heard, and still hear the prolonged echo of their praises, and have in your own mind formed a standard of excellence, in connexion with this chair, by which you will naturally be disposed to judge its present occupant. But remember, gentlemen, that these were men the most eminent in their profession whom this country has produced, whose names are set like priceless gems in our history, and who, standing in the morning light of medical teaching on this continent, loom in magnificent hues on your admiring vision. Drs. Morgan, Kuhn, Rush, Barton, and Chapman, have successively held the professorship of the Theory and Practice of Medicine in this school. Here, in this very spot, is enthroned the reputation of these distinguished men, and receives willing homage from the young thronging aspirations that surround it. A successor approaches the place illuminated by such great recollections, and is for the moment invested, in the imagination of the spectator, with the lingering effulgence. You will admit with me, gentlemen, that this is a most trying position. In the cold presence of reality, the unsubstantial glory soon fades away, and the new-comer stands in the severe outlines of truth, with no coloring from the rainbow hues of fancy; nay, dimmed and beclouded to eyes that had been dazzled by the previous brightness. This trial I am now to undergo. May I not ask of you, gentlemen, to close your eyes firmly on the past; and, in judging of my efforts, if indisposed to a partial indulgence, at least to view them in their own true light, and not through the medium of an impairing contrast."

The subject proper of Dr. Wood's address, is an introduction to his course—the Theory and Practice of Medicine. Its importance and its difficulties are depicted; a general outline of the lecturer's plan for the conduct of his course is sketched, with an allusion to his resources for making it as 'demonstrative as possible;' and the lecture is concluded with an eloquent and feeling tribute to the merits of his immediate predecessor.

Dr. J. K. Mitchell's address, now before us, is an admirable

exposition of 'the impediments to the study of Medicine,'—which we should desire to see placed in the hands of every person about to enter upon it. Dr. Mitchell takes the highest ground on the subject of the preliminary qualifications which should be exacted from the student of medicine; and, while expressing a generous sympathy with the enterprise and perseverance, which, in spite of early deficiencies, will sometimes deservedly attain the honors of our profession, he offers a forcible and earnest protest against "encouraging persons to enter upon the study of medicine without suitable preliminary learning." He well observes that

"In the earlier periods of our national existence, this evil was a necessary consequence of the state of society. Refined and well-educated men could not often consent to bury themselves in the woods to earn amidst hardships and privations a scanty subsistence. The higher qualities of the profession could not be often used, and were more seldom properly appreciated. Indeed, few students of medicine could find means of obtaining a good preliminary education, or of following out in foreign universities a complete system of instruction. Hence society was compelled to take the best accessible adviser, and habit reconciled it to what was a necessary evil. *It is so no longer! &c. &c.*"

This well-timed appeal in favor of a high standard of pre-requisites for the study of medicine, is the opening chapter to an excellent volume of general advice to the student about to engage in the pursuit of professional knowledge. Altogether, Dr. Mitchell's Introductory will add not a little to his reputation as a sound and eloquent teacher.

The maiden effort of Dr. CARSON, in the chair to which he has lately been elevated with a unanimity of approbation not often elicited, is in every way equal to the anticipations of his friends and worthy of his new position. A learned and judicious sketch of the history of his department—the Materia Medica—is appropriately followed by an impressive and eloquent delineation of its just claims to importance among the branches of medicine. We give a brief extract from the conclusion of the lecture, as a specimen of the very pleasing and elegant style of the new professor.

"Besides the efficiency communicated by a thorough knowledge of the Materia Medica, in all its details and bearings, there are other points of in view which it must be regarded. It is inseparable from the possession of general information.

The history of drugs is in a measure associated with the history of nations; as objects of care and culture they are identified with the races of the country in which they are produced: thus pepper and cubebs are associated with the habits and mode of life of the Malays, rhubarb in like manner with the Tartars, senna with the Arabs, opium with the Turks, and camphor with the Chinese. Among civilized nations the trade in them has occasioned struggles and encounters which constitute a portion of the revolutionary annals of the world. The discovery and supremacy of the Portuguese in India, their trade in costly gums, spices, and valuable products, the cession to the Dutch and their monopoly, and the downfall of Holland's power before the giant arm of England, or the exclusive traffic of the Spaniards in the products of the South American Colonies and subsequent failure to maintain it, from internal political resistance and foreign aggression, will serve as an illustration of the association referred to. From histories of discoveries and conquest, from books of travels, are to be gleaned valuable facts pertinent to the subject."

Of another maiden effort, with which we have been favored, we may say, that it has been anticipated with the same friendly interest, and welcomed with the same satisfaction, as the last. Dr. BELL bore with him to the new and distant field of labor to which he has been called, the warm wishes of a large circle of friends and of the profession generally, in Philadelphia, and, while we greatly regret his loss here, we look forward with pleasure to the prospect of his success and increased usefulness elsewhere. The address now before us was delivered on the fourth of November, last, in Cincinnati, on the occasion of Dr. Bell's assuming the chair of Theory and Practice of Medicine, in the Medical College of Ohio. It is a spirited and vigorous production, graced with a fancy and animation of style, which we were not entirely prepared for—and, we need hardly add, distinguished by an elevated tone on the subject of medical education. Such language as the following, is, indeed, of the right stamp:

"It should be the aim of the different schools of the country, in a spirit of generous rivalry, to raise the standard while increasing the means of medical education. They must carefully reject all the expedients to swell the numbers of their classes, which smack of the petty, and not always conscientious trafficker, rather than the elevation of true science, and the sensitiveness of refined literature. Encouragements held out to the illiterate, the unstable, and it may be the more unworthy still, to study medicine, are premiums given to ignorance and indolence. Many a good mechanic and thrifty farmer are lost in making them bad doctors. Genius requires no such hot-bed culture. It is a vigorous plant and will grow in a scanty soil and a bleak atmosphere, and bear fruit under an ungenial sun. It will show itself soon enough to insure all needful aid,

without its being debased by ostentatious and selfish patronage and eleemosynary support."

Dr. JACKSON'S Introductory is characterized by the freshness of thought and language, and the elevated earnestness of strain, with which we have been so often attracted and instructed in his occasional addresses. The topics of his present discourse are —"the evidences that prove conclusively the existence of order and laws in Physiology and Medicine, as well established as in the positive sciences." An eloquent and just picture is presented of the pretensions of medicine to the title of an exact science—a picture which recalled to us another of the same subject by the same hand, not less eloquent, but more discouraging, upon which we had occasion to comment several years ago.* Lectures like the present are, we think, of the best tendency. They inspire the student with the enthusiasm for his profession, which is the only basis of success and usefulness; and, notwithstanding a redundancy of technicality, which is perhaps out of place on such an occasion, Dr. Jackson's Introductory strikes us as being in the happiest style of this kind of effort.

From the Pennsylvania College, we have to acknowledge the receipt of the Introductory of Dr. W. L. ATLEE, Professor of Medical Chemistry—a well-conceived and well-written address, devoted to the unpretending, but appropriate subjects connected with the scholastic course of medical students. We have seen no better manual of advice suitable to the occasion.

Dr. PALLEN'S Introductory, delivered before the Medical Class of the Saint Louis University, is a very striking and thoughtful production on the true value of observation in Medicine, from which we should desire to extract largely, but for the length which this article has reached. We cordially recommend it as an address well worthy of close perusal.

In closing our notices of the Introductories of the present season, we take the occasion to express our regret at not having been favored with a larger number of these addresses, from other schools than those of Philadelphia. It is our desire to maintain

* Dr. Jackson's Introductory, delivered November, 1841.

the Examiner in every respect free from local bias or subserviency to sectional interests; and with this view, we may here remark, that we should be happy to present *clinical reports* from schools at a distance that may be disposed to send them to us. Published in a city and state eminently central in situation, and *national* in feeling, the Examiner will, we trust, bear this character in its relations to American medicine.

The Medical Student's Guide in Extracting Teeth: with numerous cases in the Surgical branch of Dentistry; with illustrations. By S. S. HORNOR, Practical Dentist. Philadelphia. Lindsay & Blakiston, 1851.

This little manual, which the author tells us is intended for the medical student more especially, contains much practical information that is valuable. It will be found particularly useful to country practitioners, upon whom the duty of extracting teeth very often devolves. It contains a description of the indispensable instruments, and their mode of application, together with numerous cases illustrative of the various operations. We recommend it cordially to those for whose use it was prepared.

THE MEDICAL EXAMINER.

PHILADELPHIA, FEBRUARY, 1851.

AMERICAN MEDICAL ASSOCIATION.

The Committee of Arrangements request all Societies and Medical Institutions authorized to send delegates, to forward a correct list of those selected to attend the next annual meeting, to the Secretary, Dr. H. W. De Saussure, at Charleston, S. C., on, or before the first day of April.

In consequence of the resignation of Dr. Stillé, one of the Secretaries, from ill health, all communications intended for the next meeting of the Association, must be addressed to the remaining Secretary, Dr. H. W. De Saussure, Charleston S. C.

The fourth Annual Meeting of the American Medical Association, will be held at Charleston, S. C., on the second Tuesday of May next.—*Charleston Med. Jour. and Review.*

RANKING'S ABSTRACT FOR JANUARY, 1851.

We have received the English copy of the above work simultaneously with the American reprint, which the publishers, Messrs. Lindsay & Blakiston, have laid before their subscribers with most commendable dispatch, notwithstanding the large number of illustrations which accompany it.

THE STETHOSCOPE AND VIRGINIA MEDICAL GAZETTE.

We welcome, with great pleasure, the appearance of a new Medical Journal, under the above title, in Richmond, Va., edited by Dr. P. Claiborne Gooch. From the spirit and ability which are displayed in the first number, we anticipate an interesting addition to our list of exchanges, as well as a very agreeable organ of communication with many valued friends in the Profession of Virginia.

THE PHILADELPHIA LANCET,

Is the name of a new bi-monthly which has just been issued, and the first two numbers of which we have received. It seems to be conducted with spirit, and the editor declares his determination to wage war upon quackery in all its shapes, to oppose all reverence for men and cliques, and to furnish to his readers a condensed account of all that is new and valuable in the profession. We wish him all success.

The *St. Louis Probe* has ceased to exist. The editors have discovered that there is neither money nor fame to be gained in conducting a medical monthly. The Probe speaks *feelingly*.

TO A NEIGHBORING CORRESPONDENT.

We had received, and placed on file for insertion, a communication from a neighboring correspondent; but as he has sent it to another journal, which has published it, of course it cannot appear in this. Some of our readers, perhaps, are not aware of the understanding in these matters, that no communication should be sent to more than one journal, unless the first should decline to insert it.

SYDENHAM SOCIETY OF LONDON.

We are requested to state that it is no longer practicable to supply the books of the *first*, *second* and *third* years issued by the Sydenham Society.

RICORD'S ILLUSTRATIONS OF VENEREAL DISEASE.

We have received from the publisher, Mr. A. Hart, a copy of the admirable Illustrations of Syphilitic disease, by P. Ricord, D. M. P., translated by Dr. T. F. Betton, and arranged by Dr. P. B. Goddard. We regret that the crowded state of our pages prevents us from giving, at present, more than this meagre announcement of the issue of this valuable work. At a future day we hope to do it justice. In the meantime, we can only say that these "illustrations" exceed anything of the kind that has ever appeared in this country as regards fidelity and beauty of execution.

The grand jury acting for the city and county of Philadelphia, have found a true bill of involuntary manslaughter, against Messrs. Chamberlain and McFadden, a druggist and his assistant, of this city, for causing the death of a patient by the administration of Sulph. of Morphia, instead of Sulphate of Quinine.

Although the lesson will be a bitter one to those involved, we trust it will not be without good results to many others who are grossly careless in compounding the prescriptions of physicians. In this case the prescription was written in a clear and legible hand, and the assistant on being asked to show what he had put up, produced the bottle containing *Sulphate of Morphia !*

HONORS TO MEDICAL MEN IN ENGLAND.

The honor of the order of *Bath* has been conferred on the following named medical gentlemen, in testimonial of their distinguished services: Sir W. Burnett, M. D.; Sir James McGrigor, M. D.; James Thompson, Esq., to be Knights Commanders of Bath. The following "*Companions of the order of Bath:*" Henry Franklin, Esq.; Jas. French, M. D.; Sir J. R. Grant, M. D.; J. Gunning, Esq.; R. P. Hyllyar, Esq.; J. R. Hume, M. D.; Sir J. Liddell, M. D.; D. McArthur, M. D.; B. W. Macleod, M. D.; Sir G. Magrath, M. D.; B. F. Outram, M. D.; C. Renny, Esq.; Sir J. Richardson, M. D.; C. D. Straker, M. D.; Sir J. Webb; S. Woolriche, Esq.; J. Wylie, M. D.

The honor of Knighthood has recently been conferred on three distinguished British physicians; Dr. (now Sir) Robert Carswell, Physician to the King of the Belgians; Dr. (now Sir) Charles Hastings, the founder and late President of the Provincial Medical and Surgical Association; and Dr. (now Sir) B. F. Outram, C. B., Retired Inspector of Hospitals and Fleets.

We would like to see some share of the honors that are so freely lavished upon the officers of the Line, fall to the lot of the Medical officers in both our own services. In the Army, assimilated rank has been conferred upon the Medical Staff by an act of Congress, but in the Navy, they are battling still for the mere outward show of rank which the Line would fain deprive them of. If the services of gentlemen of education and refinement are desirable, (and in this respect our medical officers will compare with any in the world,) let them at least receive the courtesies due to them. They ask no more.

Medical News.

The French Codex.—The Academy of Medicine is about to decide on the new remedies, which have been found useful, with the view to assign to such as are entitled to it, a place in the Pharmacopœia. It should be noticed, that no secret remedies can be sold in France, unless the formula has been submitted to the Minister of Commerce and Agriculture, who generally refers the matter to the Academy of Medicine, whose decision is invariably followed.

A good hit at Homœopathy.—Professor J. K. Mitchell, in his late Introductory, disposes of Homœopathy thus wittily and aptly:—A Physician educated in Philadelphia, says the Doctor, but who lapsed through a proclivous nature into Homœopathy, came to me once for a motto for a book which he was preparing on Homœopathy. As he usually consulted me when himself sick, and yet gave his microscopic doses to others, I felt no reluctance to give him a blow; so I said that once when a ranting lover on the stage cried out to his mistress, "My wound is great because 'tis small"—the witty Duke of Buckingham added from a side box—"Then 't had been greater were it none at all." Now, Doctor, said I, you can put that together thus—

> "My Physic's great because 'tis small,
> And would be greater were it none at all."

That is the whole argument of homœopathy in a couplet.

Death of a Distinguished Physician.—Dr. Royer Collard, Professor of Hygiene, at the Faculty of Medicine at Paris, died in that city in December last, at the early age of forty-seven.

John. S. Cameron, M. D., assistant Physician of the Marine Hospital, Staten Island, has fallen a victim to the typhus fever which prevails to a great extent among the newly arrived emigrants there.

RECORD OF MEDICAL SCIENCE.

PATHOLOGY AND PRACTICE OF MEDICINE.

THE STETHOMETER: *An instrument for facilitating diagnosis, by measuring the difference in the mobility of opposite sides of the chest.* By RICHARD QUAIN, M.D., Assistant-Physician to the Hospital for Diseases of the Chest at Brompton, etc.

With a view to a more accurate examination of the movements of the walls of the chest, than can be detected by the unassisted eye, Dr. Quain has introduced the instrument about to be described.

DESCRIPTION. The little instrument (see fig. 1*) consists of a flat case, not unlike a watch case; and on its upper surface is a graduated dial and an index, which stands at a maximum number, that may be considered a "zero." This case contains a very simple movement, by means of which the index can be acted on. A silk cord, which may be of a sufficient length to surround one-half, or the whole circumference of the chest, passes through an aperture in one side of the case. This cord acts on the index. When the cord is drawn out, or extended for the space of one quarter of an inch, it will be observed that the point of the index will once traverse the circumference of the graduated dial. In other words when the index has gone once round, it shows that the cord has been extended one fourth of an inch. It will be further seen, that the dial is graduated, or divided, into fifty equal parts. Each of these parts is, therefore, equal to the fiftieth part of a quarter of an inch; that is, to the 1-200th of an inch.† The index is further capable of going round a second time, on an additional quarter inch of the cord being drawn out. Hence, two revolutions of the index are equal to half an inch of movement—an extent of motion sufficient for all practical purposes. The pedestal and circular foot, shown in the same figure will be subsequently referred to.

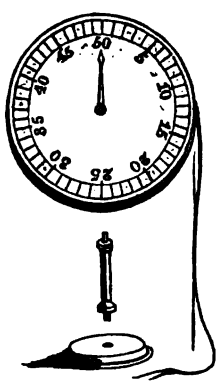

Fig. 1.

MODE OF APPLICATION. It is quite evident, that if the instrument be so placed that extension be made on the cord, the amount of the extension will be shown by the movement of the index on the dial. For example (as in fig. 2) if the instrument is laid flat on the spine, and held in its place by the first and second fingers of the left hand, whilst the cord is carried round the chest, and pressed on one of the ribs, or the sternum, by the fingers of the right hand, then, when the individual un-

* The instrument is reduced in this sketch to half size.

† In making and recording observations with this instrument, I am in the habit of expressing a fact thus: right apex, 30; left, 15. It will be understood that the motion is as 15 to 30, without reference to these figures being eighths, fiftieths, or two hundredths.

der examination expands the chest during inspiration, the amount of expansion will be communicated to the cord, and thus indicated on the dial. The cord may then be directed around the opposite side of the chest, and thus will be at once seen any difference which exists in the relative mobility of the two at the point under examination. It will, of course, be absolutely necessary in every examination, such as this, that corresponding parts of the chest be compared. For all useful purposes it may be said, that the movements of the opposite sides of the chest, in health, are identical—the difference which exists over the region of the heart, at the left side, is too immaterial to interfere with practical conclusions. The instrument may be applied to any part of the chest in the mode here described. In figure 3 it is shown as applied on the sternum, and beneath one of the clavicles. The latter position is one of considerable importance, from its connexion with the deposition of tubercle towards the summit of the lung. I find that on applying the instrument here the cord may, in this instance, be directed towards the arm more conveniently than in any other direction, as shown by the black line, and pressed against a point near the insertion of the deltoid muscle. The cord may or be directed downwards, or outwards, and upwards, or inwards, (as shown by the dotted lines,) and retained on any fixed point. Nor, as is evident, need this point be a part of the body. It may be on the bed, or on a chair, etc., always providing that the direction of the cord be such as to receive the impression of the movement of the part of the body under examination, and that its position be symmetrical at both sides.

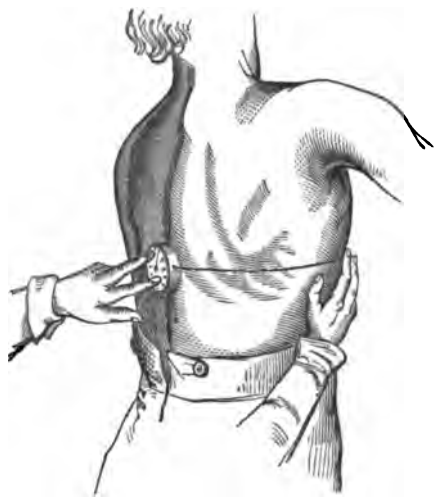

Fig. 2.

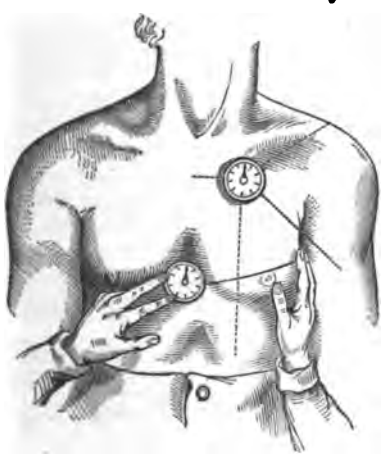

Fig. 3.

The use of the pedestal, which can be fixed in the side

of the case with the foot attached, is shown in figure 4. The instrument thus used is intended to ascertain the modifications of the movements over a limited or circumscribed spot. On this spot the foot is placed and held, (as shown in the figure) by the fingers of the left hand, the cord directed towards this point is held between the fingers of the right hand. These fingers being thus made the fixed point, must be kept steady and not allowed to touch the part under examination. The spring in the instrument is sufficiently strong to resist the gentle tension made by the fingers, and the instrument itself being pushed forward or raised by the elevation of the part during inspiration, the movement of the index, as when the case is applied on the flat surface, becomes the measure of this elevation.

Fig. 4.

Such being the mode of using the instrument, it will be necessary to say a few words on the precautions which are required in securing accuracy in the result. 1st. It is absolutely imperative that corresponding portions of the chest be examined, and that the mode of applying the instrument, and the point at which it is applied at each side, be identical. 2nd. Care must be taken that the patient breathes in the same manner whilst opposite sides are being examined. 3rd. It should be seen that the cord, when the observation is commenced, is held sufficiently tense to act on the index.

All this requires attention and some little effort; for, as in all other matters, there is little that is of any value which can be obtained without some labor. Though to some few patients these carefully conducted examinations may be irksome, yet to the vast majority they are far otherwise. In the latter, they beget confidence in the medical attendant, and frequently at once inspire a feeling which renders all future intercourse not less pleasing than it is conducive to successful treatment.

The object of the instrument is not so much to test the relative breathing powers of different individuals, (for testing which, Dr. Hutchinson's spirometer is a more correct means,) but to ascertain any want of symmetry, independently of malformation, and therefore indicative of disease, in the movements of the corresponding parts of the same chest. How much a morbid condition of the lungs may interfere with the free movements of the walls of the chest, is obvious; and in commencing disease—the earlier stages of phthisis for instance—or as a confirmation of the existence of lesion suspected by other means, mensuration will prove a very valuable aid in diagnosis. It need not, of course, be pointed out, that it does not apply when both sides of the chest are equally diseased, a very rare occurrence, however.

The instrument may be also turned to account as a means of measuring increase or diminution in the volume of solid tumours, or other swellings. —*Abridged from London Journal of Medicine, October*, 1850.

Treatment of Typhoid Fever by Mercurials. M. Becquerel has lately submitted to the French Institute a memoir on the treatment of Typhoid Fever by Mercurials, which is well worthy of attention.

In the year 1847, M. Serres read at the Institute a series of papers on "The Nature and Treatment of Typhoid Fever," and proposed a new mode of treatment, which he considered likely to exercise a most beneficial influence on the progress and character of that disease. The mercurial treatment of M. Serres consisted in the internal use of the black sulphuret, in doses varying from twelve to sixty grains, and in frictions over the abdomen with common mercurial ointment, in quantities varying from half an ounce to one ounce daily.

This treatment was continued for ten or twelve days—even longer, until the prominent symptoms of the fever had given way.

Having been appointed to take charge of M. Serres' patients at la Pitié for some time, M. Becquerel resolved on submitting the mercurial method to further experiment. He therefore made trial of it on fifteen patients affected with typhoid fever, abstaining, with some slight exceptions, from the use of any other remedy.

The black sulphuret of mercury was administered to each patient immediately on his admission; he began with thirty-two grains, in the form of pill or powder, divided into five or six doses. If no improvement took place in two or three days, the dose was increased to forty-eight or even sixty-two grains. As soon as convalescence commenced, the remedy was discontinued. In no case was the salivation severe enough to render discontinuance of the mercury necessary.

The mercurial ointment was employed in the quantities recommended by M. Serres, being increased in such cases as demanded an increase of sulphuret. Thus, with thirty-two grains of the sulphuret, sixteen scruples of mercurial ointment were employed in two frictions; and with sixty-four grains, thirty scruples. In order to favor absorption, the abdomen was cleansed every day with soap.

The accessory remedies employed were—ice, seltzer-water, and lemonade, as a drink; simple lavements, or, in cases of constipation, a laxative clyster.

In ataxic cases, of which four occurred, musk was administered as a stimulant to the extent of five or six grains a day.

The following are the results of the practice:—Fifteen patients, all laboring under typhoid fever in a severe form, were treated—ten men, five women. The men were aged—2, 16 years; 2, 17; 2, 18; 1, 20; 2, 22; 1, 36 years. The ages of the women were—15, 18, 20, and two of 21 years.

The male cases may be arranged as follow: 4 laboring under the ordinary abdominal form; 5 presenting adynamic symptoms of a very severe nature; and 1 with ataxic fever, in which the delirium and agitation predominated.

Of the females, 1 was affected with the adynamic form; 1 with common typhoid fever; 1 with the ataxo-adynamic, and two with the ataxic fever. Dating the commencement of the attack from the first appearance of a

febrile movement, we find that 2 entered hospital on the second day; 2 on the fourth; 7 on the fifth; 3 on the sixth; and 1 on the eighth day. The premonitory symptoms of headache, muscular depression, &c., had, besides, varied from three to twelve days before the regular febrile attack commenced.

The treatment was begun, in the 15 cases, on the day after admission. The following were its principal effects:—

Febrile Movement.—The first few doses of the sulphuret, and a few frictions, diminished the heat and dryness of the skin, which in some cases became moist. The pulse, at the same time, constantly fell. It varied from 84 to 116 in the different cases, and in all, the frequency was diminished by the third day.

Mouth.—The dry, rough condition of the tongue, and the blackness of the lips, never disappeared until salivation had set in. The latter occurred twelve times in the 15 cases: it was absent twice; and in these two cases, recovery was just as prompt as in the former. In the only fatal case, the tongue remained dry to the end of the disease. In every case but one the salivation was slight: in the one excepted, the tongue and gums continued swollen for twelve days.

With respect to this effect, the following propositions appear to be established:—

1. In ordinary typhoid fever of moderate intensity, salivation occurs more quickly than in the other forms; it is more decided, and continues a little longer during the convalescence, of which it is usually the precursor.

2. In severer cases, the salivation occurs at a later period, and is less considerable; sometimes it takes place at the moment the febrile symptoms disappear; in other cases, a few days previously.

3. In the most dangerous cases, it is very difficult to excite salivation, and, until this takes place, we have always to dread some accident. Great perseverance is therefore requisite.

4. Finally, in a few mild cases, salivation does not exist, the mercury appearing to master the disease in less doses than are necessary to stimulate the salivary glands.

Tympanitis.—In every case, except the fatal one, this symptom diminished with great rapidity, and that from the commencement of the treatment.

Bowels.—The mercury produced, in two cases, one or two fluid stools daily; in two others, accompanied by constipation, it had no laxative effect, and lavements became necessary. In three cases of diarrhœa (five or six fluid stools a day) the looseness diminished in a remarkable manner as soon as the remedy was employed. In eight cases it had no effect whatever on the state of the bowels, neither augmenting nor diminishing the diarrhœa.

Rose Spots.—These spots, when situate on the abdomen, were invariably removed in twenty-four to thirty-six hours by the mercurial frictions; but they continued their course on the other parts to which mercury was not applied.

Delirium.—When this symptom was at all prominent (four cases) musk

was given to the extent of five or six grains daily. Although so violent that the use of the straight-jacket had been necessary, these patients became calm in four or five days. As to the cough, chest symptoms, and stupor, they followed the general course of the disease, and appear to have been modified in a secondary way only.

Duration of Treatment.—In four cases the treatment was prolonged to 7 days; in three cases, to 8 days; in one to 9 days; in three to 10 days; in one to 12; in one to 15; in one to 16; in one to 17 days. The mean duration was, therefore, 10 days.

The quantity of mercury employed was, on an average, 12½ scruples of the sulphuret, and 200 scruples of mercurial ointment. The smallest quantity was, 7 scruples of the sulphuret, with 112 scruples of ointment; the maximum, 24 scruples of the former and 360 of the latter.

Duration of the Disease.—The mean duration of the disease in fifteen cases was 16 days. In one case the duration of the fever was 12 days; in two, 13 days; in three, 14; in three, 15; in one, 16; in one, 18; in two, 20 days; in one, 21 days; and in one, 23.

From the above facts M. Becquerel draws the following conclusions:—

The treatment of typhoid fever by the black sulphuret of mercury and mercurial frictions over the abdomen, is attended by the most advantageous results. The effects are more striking in proportion as the disease is treated at an early period. In fifteen cases, all of a severe nature, taken indiscriminately, only one death occurred, and that from perforation of the intestine. The duration of the disease, also, was unquestionably shortened by this method of treatment, for it varied from twelve to twenty-three days. The duration of the treatment varied from seven to seventeen days.

The following were the most remarkable effects of the remedy:—Diminution of the force and frequency of the pulse, and of the heat of skin; *rapid and early disappearance of the typhoid eruption*; rapid removal, also, of the tympanitis; excitement in a great majority of the cases of salivation on the 6th to the 13th day, which is almost a certain sign that the treatment has succeeded, and that the patient will recover. Combined with mercury, the musk was effectual in subduing rapidly the most severe ataxo-adynamic symptoms.

Since the publication of M. Becquerel's memoir, ten additional patients, laboring under severe typhoid fever, have been cured by the mercurial method. This gives a sum of twenty-five cases, with one death—a result which certainly entitles the practice to consideration, if it does not at once stamp its merit.—*London Medical Times*, Nov. 2, 1850.

MATERIA MEDICA AND THERAPEUTICS.

American Antidote against Snake-Poison.—Dr. Pereira submitted to the meeting a specimen of cedron seeds (seeds of *simaruba cedron*) from Panama, in South America. These seeds have long been used, and with great confidence, by the native doctors of Panama, as an antidote against snake-poison. The reputation they have thus acquired has recently attracted attention in France, where it is said a great con-

gress of medical men is appointed to be held next month, for the purpose of testing, by experiment, the virtue of this celebrated remedy, and two gentlemen, M. Auguste Guillemin and M. Hippolyte Fournier, Professor of Mathematics of the department of Arvegron, have offered themselves to be operated upon. It is announced that all the different States of Europe will be represented at the congress. The remedy is proposed to be applied to the cure of mental disease and epilepsy. Notwithstanding the interest which has thus been excited on the Continent, by the description given of the wonderful effects produced by the *cedron*, Dr. Pereira appears to have very little faith in its efficacy, at least in such cases as those referred to.—*London Medical Times, Dec.* 14, 1850.

[In addition to the statement given above, we have received a letter addressed to Dr. Peter Smith of the City Hospital at San Francisco, California, by Don José de Obaldia, Governor of Panama, dated Nov. 22d, 1849, in which he confirms the experience of the native physicians of Panama. He says that the tree which produces the fruit, and is called the "cedron," is described in the scientific work of Dr. Cespedes, one of their own naturalists, and that the fruit is given internally in five grain doses, as an antidote to the bite of the rattlesnake, viper, and scorpion, and to the sting of wasps, &c.

For internal use, the scrapings of the fruit are administered in a wine-glassful of spirits or warm water, at the same time that the wound is washed in an infusion and covered with the scrapings, secured by a bandage. The dose is to be repeated every two hours till relieved. To quench the attendant thirst, a weak infusion of the cedron is exhibited.

Several cases are related in which the cedron proved beneficial, where other means had failed to restore those bitten by venomous snakes, and what is worthy of notice, the recovery was much more rapid than in the case of those less violently affected and who were restored by other means.

The cedron has also been used successfully in cases of retained placenta (Pares,) both as an internal remedy and an external application to the genitals.

The tree grows abundantly in humid places, and as the wood is inapplicable to the uses of life, and the fruit rejected by animals on account of its bitterness, an abundant supply is predicted. We are also informed that the scrapings have been very sucessfully employed by Dr. P. Smith as a substitute for Quinine in the treatment of malarious fevers. A drawing of the fruit will be found accompanying Dr. Horner's article on California in this number.—Eds. Examiner.]

THE

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AND

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NEW SERIES.—NO. LXXV.—MARCH, 1851.

ORIGINAL COMMUNICATIONS.

Lectures on Scarlet Fever. By Caspar Morris, M. D., late Lecturer on Practical Medicine in the Philadelphia Medical Institute.

Lecture II.

The malignant being by far the most serious form of the disease, not only from the severity of the features and gravity of the results in individual cases, but from the fact that its epidemic visitations are more wide-spread and frequent than those of the milder forms, you will, I trust, pardon me, if I dwell somewhat at length upon the description of it. To the account of the disease as it appeared in London in 1747–8, just quoted from the accurate and conscientious Fothergill, allow me to add that of our own first medical writer of distinction, Dr. Benjamin Rush, who in his Medical Observations and Enquiries, thus describes the occurrence of this form of the disease in the year 1783, and 1784, in this city. "In most of the patients who were affected by it,

it came on with a chilliness and a sickness of the stomach, or a vomiting, which last was so invariably present that it was with me a pathognomonic sign of the disease. The swelling of the throat was in some instances so great, as to produce a difficulty of speaking, swallowing and breathing. In a few instances, the speech was accompanied by a squeaking voice, resembling that which attends the cynanche trachealis. The ulcers on the tonsils were deep, and covered with *white*, and in some instances, with *black* sloughs. In several cases there was a discharge of a thick mucus from the nose, from the beginning; but it oftener occurred on the decline of the disease, which not unfrequently happened on the fifth day. Sometimes the subsiding of the swelling of the throat was followed by a swelling behind the ears."

"An eruption on the skin generally attended the symptoms, which have been described. But this symptom appeared with considerable variety. In some people it preceded, and in others it followed the ulcers and swelling of the throat; in some it appeared only on the outside of the throat, and on the breast; in others it appeared chiefly on the limbs; in a few it disappeared on the second or third day of the disease, and never returned afterwards. I saw two cases of eruption without a single symptom of sore throat."

"The fever which accompanied the disease, was generally the the typhus mitior of Dr. Cullen. In a few cases it assumed symptoms of great malignancy. The disease frequently went off with a swelling of the hands and feet. I saw one instance in which the swelling was absent, but the patient complained of very acute pains in the limbs, resembling those of rheumatism."

"In two cases which terminated fatally there were large abscesses; the one on the outside, the other on the inside of the throat. The first of these cases was accompanied by troublesome sores on the ends of the fingers. One of these patients lived twenty-eight, and the other above thirty days, and both appeared to die from the discharge which followed the opening of the abscesses."

"Between the degrees of the disease which I have described, there were many intermediate degrees of indisposition which belonged to this disease."

"I saw in several cases a discharge from behind the ears and from the nose, with a slight eruption, and no sore throat; all three patients were able to sit up, and walk about. I saw one instance of a discharge from the inside of one of the ears in a child, who had ulcers in the throat, and the squeaking of voice. In some, a pain in the jaw, with swellings behind the ears, and a slight fever, constituted the whole disease. In one case the disease came on with a coma, and in several patients it went off with this symptom. A few instances occurred of adults who walked about, and even transacted business until a few hours before they died."

"The intermitting fever, which made its appearance in August, was not lost during the month of September, (the time at which the scarlet fever became prevalent.) It continued to prevail, but with several peculiar symptoms. In many persons it was accompanied by an eruption on the skin and a swelling of the hands and feet. In some it was attended by a sore throat and pains behind the ears. Indeed, such was the predominance of the scarlatina anginosa, that many hundred people complained of sore throat without any other symptom of indisposition. The slightest occasional or exciting cause, particularly cold, seldom failed of producing the disease."

"The epidemic prevailed in Philadelphia, from September throughout the winter. In the Spring it disappeared, but spread afterwards through the neighboring States of New Jersey, Delaware and Maryland."

You will here observe, that while the prevailing type of the epidemic thus described, is of that severe character which brings it under the form of the disease which now claims our notice, the occurrence simultaneously of cases of a milder degree, prove their dependence on the same cause. Were it proper to burden your memory or exhaust your attention by swelling these quotations, I might add to them similar descriptions of the disease given by distinguished writers upon medicine in each succeeding generation. But as you are, I trust, prepared to recognize it, should you ever be called upon to combat its malign influence, we will pass on to the consideration of the last of the four classes or groups of cases, into which I have proposed to distribute the disease.

While the *anginose* and *malignant* are the predominating types during every severe epidemic prevalence of the disease, and the *simple* form that which is generally found in sporadic cases, those which I am now to describe are found associated with the two former classes; occurring at the same time, and either in the same households, or in such circumstances as to prove their dependence on the same cause. The very term *Irregular*, by which I have designated this division, will at once convey to your minds, the suggestion that it must be impossible to give any general description which would embrace all the varieties included under that term. I shall therefore be compelled to enter into the detail of individual cases. By far the largest number owe their peculiar features to that condition of the nervous system which gives rise, in other febrile diseases also, to that collection of symptoms which marks what are erroneously called *congestive* cases. The vital forces are overwhelmed by the intensity of the morbid impression, and the patient dies without time being afforded for the disease to develop its essential features; or, if the duration of the case be more prolonged, so extreme is the force of the cause of disease, or so inadequate the power of resistance, that the development is only partially accomplished. The suddenness of the invasion has been noticed already as one of the peculiarities of scarlet fever. These cases are marked especially by this sign. I have known an infant, which had left home, apparently in perfect health, for its usual morning airing, brought back within an hour, with stupor and general muscular relaxation, cold surface, feeble pulse and total insensibility; no remedies that could be applied, produced any reaction, and it died within twelve hours. Two other children in the same family were seized within a few days, by scarlet fever, which manifested the usual signs, and ran a regular course, and thus placed beyond cavil the true nature of the case which preceded them. In another instance, while visiting a lady laboring under a chronic malady, my attention was drawn by the mother to the unusually healthful condition of an only child of two years old, gamboling on the floor. Within twelve hours, I was called to see it lying comatose and convulsed and within twelve hours more it was dead. A maculated appearance of the skin, and the known prevalence of scarlet fever in the vicinity, were here

the only grounds for assuming this to be the nature of the disease, as there were no other children in the house, to be subjected to the poison. Dr. Rush, you will remember, reports "a few instances of adults, who walked about, and even transacted business, until a few hours before they died."

It is not many years since a Judge in one of our Courts was seized with nausea while on the bench, and retired to his home, where for two days he remained, scarcely willing to admit himself to be sick, and reluctant to confine himself to his chamber, though the rapid, feeble pulse, and an imperfect eruption, too plainly indicated the nature of the affection; and on the third day he died, while in the act of shaving himself.

Dr. George Gregory, in his lectures on Eruptive Fevers, delivered at St. Thomas' Hospital, London, reports the observation of cases of a somewhat similar kind. He says, "In some extreme cases, the nervous system shall be so completely depressed and subdued by the virulence of the miasm, and the mass of the blood so thoroughly poisoned and disorganized by it, that all the ordinary appearances of scarlet fever are masked; petechiæ, coma and a sloughy state of the throat alone appear. Life rapidly yields under such an attack." In confirmation of this assertion, he reports as having passed under his own notice, the case of a family, in which "a mother and two grown up daughters died. In each of the three cases the nervous system was utterly prostrated, and in a state of collapse. There was no violence, no delirium, no struggling for breath, but the pulse was small, the skin cold, and the whole system depressed by the intensity of the poison. Neither wine, brandy, nor capsicum could put any life into them. They sunk, one after another, without any attempt to rally. It was difficult to believe the, disease Scarlatina, but the eldest son took it in the usual form, and put the matter beyond doubt."

A lady, near the close of gestation, had the usual symptoms, which resulted from "taking cold" after fatigue and exposure, by which she was confined to the bed during two days, and from which she apparently quite recovered. After an interval of twenty-four hours, she was seized with a chill, followed by fever, with exceedingly rapid pulse and slight swelling and redness of the soft palate and uvula. I shall not detain you by the description of the

treatment, which is irrelevant to the point now under observation, further than to remark that it was promptly administered and decidedly and actively antiphlogistic. There was never in the progress of the case, any great degree of internal swelling of the throat, and not the least about the neck externally; cough and dysphagia, with an entire inability to lie down, from the danger of suffocation, were the urgent symptoms. The heat of the skin was very great, but without any redness of the surface; the circulation continued exceedingly rapid throughout, and the countenance expressive of the greatest distress. The power of uttering sounds was lost, and there were some slight deposits of lymph on the uvula. This difficulty of swallowing, loss of voice, *rapid pulse* and great heat of skin, were the prominent symptoms, which continually increased in spite of the most energetic treatment, until she died on the fifth day of the disease, about twelve hours after having given birth to a living child. I was assisted in the treatment by three of the most eminent physicians of the city, none of whom suggested scarlet fever as the nature of the case. Examination of the body after death, exhibited, with sufficient clearness, the cause of these symptoms. A small abscess between the posterior walls of the pharynx and the vertebræ had caused the difficulty of swallowing, while minute deposits of pus beneath the mucous membrane on the arytenoid and cricoid cartilages, destroyed the voice. These lesions could not, however, have caused death so promptly, nor would they have given rise to the excessive rapidity of pulse, and heat of skin. Within a week after her death, two well marked and violent cases of scarlet fever, with severe anginose symptems, occurred in the same house. One in the person of the nurse, who had waited upon the case I have thus described, and the other in that of a child.

In another instance, an infant, endowed with great vigor of constitution, was taken ill with febrile symptoms accompanied by slight difficulty of deglutition. No appearance of disease of the fauces was manifest to the most careful examination, beyond a very slight redness of the edge of the half-arches. Soon the voice became enfeebled, and the respiration impeded, but without cough. The pulse was very rapid, the skin hot and dry, but bloodless, presenting a waxlike paleness. The glands about the

base of the jaw became swollen, the cellular tissues of the neck infiltrated with serum: the difficulty of swallowing increased, the voice became stridulous. These symptoms grew progressively worse till the child died, exhausted by the violence of the febrile reaction. Inspection of the body after death exhibited a superficial ulceration of the mucous membrane lining the larynx and upper part of the trachea, which had given rise to the glandular swelling and œdema. The rapidity of the pulse, heat of skin and peculiar condition of the neck, all combine to induce me to class this case with scarlet fever without hesitation. I have no doubt that other cases, well developed, would have followed, had there been children in the family. Many other similar cases have fallen under my notice, which have been so very evidently connected with this disease, as to forbid a doubt on the subject.

The course of the disease in the *Malignant* and *Irregular* forms, cannot be reduced to the regularity which marks the *Simple* and *Anginose.* In the simple uncomplicated form, the fever subsides from the 5th to the 7th day; and in favorable cases of the anginose variety, the primary lesions disappear with it, and convalescence is fairly established. When the ulceration of the throat and posterior nares is more severe, the primary fever is, on the contrary, merged insensibly into the fever of irritation produced by these lesions, and the case may run an uninterrupted course of many weeks; while in the malignant form, the patient may either sink into a comatose condition and die from the first force of the disease between the 3d and 9th day, or, if there be reactive force sufficient to carry the case over these periods, there still remains the irritation resulting from sloughing ulcers of the throat, abscesses beneath the jaws, and ulceration of the nares and ears, to be added to the depressing influence of the primary disease; and not unfrequently acute meningitis supervenes, and causes death with the usual symptoms of that disease superadded to those already described. Croup is also an occasional complication, either caused by the extension of the deposits already described as frequently occurring on the tonsils, or by the active inflammation of the larynx without any exudation. I have seen it in one instance prove fatal when the anginose symptoms had been very slight indeed, and where the most care-

ful investigation could not detect the smallest exudation in the fauces. In the anginose malignant forms, the extension of the disease to the larynx and trachea is by no means uncommon, and I believe more careful observation will confirm the suspicion I entertain, that the disease known as Croup, which begins with inflammation of the tonsils and exudation of lymph—gradually extending to the larynx—is one of the forms of the disease now under consideration. To this conclusion I am led by having observed that such cases are particularly prevalent at the times when we know the scarlet fever influence to be most active, and from their evident dependence on some other cause than the mere vicissitudes of temperature which give rise to the inflammatory croup. The rapidity of the circulation, the tendency to gangrene of the throat, the general similarity of all the symptoms to those cases of undoubted scarlet fever in which the disease extends to the larynx, and the frequent occurrence of several cases in immediate succession in a family, all tend to the confirmation of this impression.

There has been some diversity of opinion as to the *cause* of scarlet fever. That it depends on some unknown agency, producing what is known as epidemic influence, no one denies. In what this influence consists it is impossible to determine, with our present limited knowledge and means of observation. Telluric emanations, sidereal influences, animalculæ and fungi, have all been invoked in their turn. It were vain to attempt to decide between these rival claims; a more important question demands our attention, and should be carefully examined. Is it ever propagated by contagion? The evidence in the affirmative is so positive that I cannot admit a doubt; so many well marked cases have passed under my own notice, and so many more are reported on authority quite beyond question, that I see not how any one can hesitate. It is asserted by those who disbelieve the contagiousness of the disease, that the instances in which single cases occur in a large family or school, without extension to others, even where no precautionary measures are adopted, are sufficiently numerous to disprove the influence of contagion; which, if characteristic of the disease, must operate equally at all times where it meets with subjects not protected from its attacks; and they aver that its extension, when this does take

place, may be ascribed with greater propriety to a general exposure to the epidemic influence, the operation of which is acknowledged by all, than to contagion. Those who thus reason, however, overlook the fact, that even the diseases which all confess to be possessed of a power of propagating themselves are liable to the same uncertainty. I have, more than once known a single case of small pox to occur in a large family, without spreading, though no precautionary measures were employed; and what physician is there who has not been annoyed by the necessity for repeated insertions of vaccine virus, the susceptibility to the impression either wholly absent, or too feeble to be kindled into activity. The question of contagion is not one of merely speculative interest. Its practical bearings are highly important. Allow me, therefore, to mention some of the facts which prove it. I had a child under my care with scarlet fever of a very severe grade. The aunt came to the city from a section of country in which there was no disease prevalent, and took the complaint. A gentleman died of scarlet fever; a relative who had been alienated from him for many years visited the body, and died within a fortnight of the same disease. Those engaged in nursing cases of scarlet fever, and often all the adult members of a family in which it is present, are liable to sore throat and fever, without any eruption. The wife of a medical friend of mine, who was aiding in the care of the children of a relative, was seized with this modified affection, and communicated scarlet fever in all its integrity to her own children. It frequently happens that children who have had the disease absent from home, communicate it to others on their return during convalescence. This brings naturally to our notice another question. Can the principle of contagion attach itself to the clothing or persons of those who are not themselves affected by it, or the disease be conveyed or communicated by them? My own observation leads me to deny the possibility of the communication by mere transient intercourse. I have never, in long continued and extended practice, known the disease to occur in a family which I was visiting for other complaints, during my attendance, nor have I ever heard of an authenticated instance in which this has occurred. I have, however, known an instance in which a family had abandoned their dwelling immediately after the occurrence of two fatal cases.

The house was left uninhabited during several months; when a family, from a distant city, in which the disease was not prevailing, took possession of it, and the furniture which had been allowed to remain. Within two weeks the disease made its appearance in the family, and proved fatal to several children. Dr. Percival, of Dublin, than whom we can have no higher authority, in writing to Dr. J. Mason Good, says, "*Cynanche Tonsillaris* and *Maligna*, I consider with you a species of Roseola. (This is the term applied to scarlet fever by Dr. Good.) All have been produced by the same specific contagion, which in one instance was imported here from England in a Pandora's box, containing plumed soldiers, which had served to beguile the convalescent hours of a young family, and were sent by them as a present to their quondam playmates in this capital."

The late professor Hosack of New York, in supporting the doctrine of its contagious character, mentions the instance of a family who deserted their house after a fatal attack of scarlet fever. It was thoroughly cleansed and whitewashed, and the family remained absent six weeks. Immediately on their return, the disease reappeared. There is one source of fallacy in this case. The period of *incubation*, as it is termed, the time which elapses between the exposure to the sources of the disease and its development, during which the cause is supposed to lie latent in the system, but preparing to exhibit its characteristic features, is more uncertain in this, than any other disease of the same class. It is therefore not impossible that the germs of the disease may have been imbibed before leaving the house, either directly from the same source as the first case, or mediately through it. No such suspicion throws a shade on the instance I have mentioned before. The following cases will prove as well the contagious character of scarlet fever, as the uncertain duration of this latent period. A lady came from a section of country wholly exempt from this disease, to assist in nursing the child of a brother. Within forty-eight hours after her arrival, she was herself seized with a well marked attack. This is the shortest interval between exposure and sickening I have seen or read of. The longest I have known, was twenty-eight days. This case was equally well marked. A gentlemen designing to spend the summer in Europe, had engaged passage

for himself and family to sail on the 1st May. One of his three children was seized with scarlet fever on the 1st day of March. Desiring that all should have the disease, and be quite recovered before leaving, no interruption of intercourse with the other children was attempted; the two children who were well were allowed free access to the room in which the sick one lay. The second seizure occurred on the 16th of March, and the third not until the 28th. Dr. Maton reports a case in which twenty-six days intervened. From eight to fourteen days is however the usual interval; and though occasionally several cases may occur simultaneously in a large family or school, it is much more common that one should be first taken sick, and another after an interval of greater or less duration, rarely beyond ten days; and then the other members of the family or household, who have not previously had the disease, are taken sick at about the same time, or in more rapid succession; while the adults are all more or less brought under the influence of the disease, with sore throat and fever. This mode of invasion by successive cases is almost uniform, and is certainly more easily accounted for, on the presumption of contagion, than in any other manner.

The attempt has been made to impart the disease by inoculation, but without success. This was to have been anticipated, as there is no analogy between this disease and variola, which would lead to the presumption it could be thus communicated. Whether introduced by contagion, or originating in some unknown atmospheric changes, scarlet fever is very often *epidemic.* In this respect it manifests a peculiarity as decided, as in other points of character. It is often bounded by very narrow limits. Not only will one part of a large city be exempt while it prevails in another, but I have known it confined to a single block of houses, while all the neighboring squares were healthy. Sporadic cases are frequently occurring, but these are always mild, and generally of the simple form, or with slight anginose symptoms. It often prevails in this mild manner, or entirely disappears for several years, until its malignity is almost forgotten, or may be even doubted. This was decidedly the case in our city for many years before 1830. Dr. Emerson says: "It is a remarkable fact, that in the twenty-one years from 1807 to 1827, inclusive, the total mortality from scarlet fever was only

102 out of 53,000 deaths. Doubtless some cases were reported in the bills of mortality under the vague title of sore throat, of which the amount during the whole period referred to, was 355; but with such additions, the proportional mortality from scarlet fever, would be trifling compared with its ravages in more recent years. *Only one death was reported in* 1827, *not one in* 1828. In 1829 there were 9, in 1830, there were 40. Since the last named year, the mortality from this source has very much increased, as will be apparent from the number of deaths reported in the subsequent ten years, viz.

1821,	200.	1836,	240.
1822,	307.	1837,	205,
1833,	61.	1838,	134.
1834,	83.	1839,	225.
1835.	205.	1840,	244.

Making a total mortality from this cause in ten years, of no less than two thousand and fonr cases." Dr. Emerson's conjecture that some scarlet fever cases were included in the 355 deaths from sore throat, is undoubtedly correct, as I know there was an epidemic angina during the period embraced in those returns. It was in the year 1828, in which only one death from scarlet fever is reported, I received an appointment in the Dispensary; and the district allotted to my care was that in which the epidemic, which began in 1829, and increased so fearfully till the year 1832, first exhibited its ravages. The contrast afforded by the comparison of the three years, 1827, 28, 29, with the three which followed, exhibits the point I wish to illustrate. So remarkable is this feature of the destiny of scarlet fever, that repeatedly it has been described as though it were a new disease—a whole generation of medical practitioners passing without the appearance of an epidemic.

In the year 1831, a highly respectable phyiscian, very extensively engaged in practice, told me he had never seen a fatal case of scarlet fever; his testimony thus corresponds with that of the bills of mortality for the period during which he had pursued his professional career. There is no fixed term of duration of these epidemic periods. In some instances a grand epidemic cycle appears, composed of series of minor epidemics. Thus, for instance, the table furnished by Dr. Emerson through

the entire ten years, may be considered one epidemic period, in contrast with the twenty which preceded, there are two marked interruptions to the otherwise regular average mortality. Though, as I have before remarked, the epidemic visitations of this disease, generally partake of the typhous or malignant character, it occasionally happens that one may assume the sthenic form, and be attended with active inflammatory complications. In this respect the history of the past is instructive, as we shall find when we come to consider the treatment appropriate to the disease. Neither season of year, nor temperature appear to exert any influence over it. By some writers the winter, and by others the summer, is assigned as the period especially favorable to its diffusion. The worst epidemics I have seen, have been in the changing weather of the spring and fall.

(To be continued.)

Case of Poisoning by Arsenious Acid. By G. W. Brown, M. D., of Port Carbon, Pa.

To the Editors of the Medical Examiner.

Gentlemen,—I enclose you my notes of a case of supposed poisoning by arsenic, which was the subject of a criminal trial at a late term of our court, in Schuylkill county, Pa. Should you deem them of sufficient interest, I should be glad to see them published in the Examiner.

The subject of the poisoning, was a mulatto woman, the wife of a colored man, named Samuel Bertolett. They resided about seven miles from my house, and had always lived peaceably together till within the last two years; since which time Bertolett had become intimate with a colored woman, named Turner, who had left her husband.

Bertolett and his wife had had eleven children, the eldest quite a grown up man. Some time during the summer of 1849, Bertolett took the woman, Turner, home to his house, and gave her complete control of his establishment, not excepting his wife and children. This, of course, gave rise to frequent bickerings and quarrels between Bertolett and his wife, and between the latter and Turner; and thus things went on till the 12th of November, 1849. On that morning, Bertolett, before going to his

work, told his little daughter, some 14 years of age, that if her mother should be taken sick during the day, she should come for him. Between eleven and twelve o'clock, Mrs. Bertolett, as was her usual custom, took her husband's dinner to him, a distance of a mile, while Turner remained at home to prepare the dinner for the rest of the family. Immediately on the return of Mrs. Bertolett, she, with the rest of the family, were called to dinner by Turner. The meal consisted of cabbage, potatoes, pork, bread, and coffee. Directly after seating themselves at the table, the little daughter made the observation, that her mother's coffee looked different from the rest. It had the appearance of pepper floating on the top of the liquid. Mrs. Bertolett remarked at the same time, that her coffee had rather a strange taste; but Turner replied that the children had been playing with the pepper box, and she supposed they had spilled some upon the coffee. After dinner, Mrs. Bertolett started to go to a neighboring village, to make some purchases; but, on the way, she was seized with a severe burning pain in the stomach, accompanied by violent retching and vomiting, which continued incessantly, till near eleven o'clock, when she died. About seven o'clock, P. M., Dr. D. J. McKibbin was called in, and found her laboring under the above symptoms, with the addition of cold extremities, inability to speak, clammy perspiration, bloody diarrhœa, and all the symptoms of poisoning from arsenic. But, from the fact of her having partaken of such indigestible food for her dinner, and suspicion not being aroused, he supposed it to be a severe case of cholera morbus, and prescribed accordingly. He staid with his patient till near ten o'clock, P. M., when from the persistence of the symptoms in spite of the remedies, and from a careful review of the case, he told her husband that he believed his wife was laboring under the effects of an irritant poison of some kind, of which she would die in a short time, and she did die in half an hour afterwards.

On Wednesday, 14th November, 1849, I was called to make a post mortem examination of the body; and with the assistance of Drs. McKibbin and Robinson, I proceeded to perform that duty. The body was stretched to the full length, in the usual way, preparatory to interment, with the hands resting upon the abdomen, on either right and left iliac region.

The countenance presented the appearance of extreme suffering; the muscles were nearly as rigid as usual; the ends of the toes and fingers were of a dark leaden hue; the back, sides, and posterior parts of the legs and arms, presented a dark and mottled appearance; the abdomen was slightly tympanitic; under each hand there was a dark green spot; and in the right groin, immediately over one of the absorbent glands, was an old ulcer partially cicatrized. Upon opening the thorax, we found the pleuræ and pericardium pale, but healthy in appearance; the heart very much distended in all its cavities with a dark fluid blood, but otherwise healthy. The lungs, on their anterior portion, were healthy, but rather paler than natural; the posterior portion of them was congested, and of a very dark appearance, looking as though ink had been applied to them. On opening the abdomen, we found the peritoneum in a state of high injection, so much so as to give it a reddish appearance, and upon raising it up to the light, it resembled very much an artificial preparation, in which the arteries had been injected by vermilion. As we approached the stomach and bowels, the redness increased, and continued over these organs. We now tied the œsophagus and duodenum, and removed the stomach, which contained about a pint of fluid and solid matters. We next examined the intestines by tying and laying them open. The mucous surface was covered with a thick, bloody mucus, and was of a deep red color, approaching to brown, with here and there deep yellow spots; and upon examining these spots more closely, we could discover small ulcers in the centre, with softening of the surrounding tissue, so that we could separate it from the muscular coat beneath by very slight pressure with the finger. These yellow spots, containing the softened and ulcerated patches, were spread over the intestines as low down as the ileo-cœcal valve, and were deepest in the centre, and gradually lost their yellowness as the circumference was approached, till they were merged in the surrounding redness.

The liver was gorged with blood, as was also the spleen, but they were otherwise healthy. The bladder was small and contracted, and its coats appeared thickened. The uterus appeared healthy, as were also its appendages, and the external genitals. After removing the stomach, and placing it in a covered vessel, I

took it home with me, when we proceeded to examine it. The contents were emptied into a glass vessel and tightly corked, and the stomach laid open along its lesser curvature. The mucous membrane was covered with the same kind of bloody mucus as the intestines; but we could not detect any shining particles in it. It presented the same appearance as that of the intestines, but was of a much deeper red, and the yellow patches were more numerous and larger. At the large end of the stomach there was one as large as a Spanish dollar, with two large ulcers in the centre, and the mucous membrane was softened so as to be easily separated from the muscular coat beneath. There were several large patches near the pyloric orifice of the stomach, also containing ulcers.

The mucous membrane of the œsophagus presented a red appearance, but was not nearly so dark as that of either the stomach or intestines. The stomach was now cut up into small pieces, and put into the glass vessel with the contents; some water and acetic acid were added, and the vessel was placed in a water bath, and boiled until I was satisfied that any arsenic it might contain must be dissolved. I then strained the liquid through a coarse cloth, so as to separate the liquid from the solid matters, and then filtered through paper, allowing the solution to stand for a day or two, when I afterwards filtered again. I now took an eight-ounce vial, and put into it eight grains of arsenious acid, and eight grains of the carbonate of potash, and filled the vial with water, placing the whole in a water bath till complete solution was effected. I now took two two-ounce vials, and placed an ounce of the solution of the stomach into the one, and an ounce of the solution of the arsenite of potash into the other, and then added sufficient acetic acid to both to neutralize any alkali they contained, or coagulate any organic matters. I then added to each vial a portion of a solution of the ammonio-sulphate of copper, when, immediately, a deep green precipitate was thrown down to the bottom of each, so nearly resembling each other, that scarcely a shade of difference was perceptible. I then applied the ammonio-nitrate of silver in the same way, but produced no precipitate whatever. This experiment I repeated several times, with the same results. I now placed about eight ounces of the solution of the contents of the stomach in a proper

apparatus, provided for the purpose, and added acetic acid as before, and passed through it a stream of sulphuretted hydrogen gas, when immediately a deep lemon yellow precipitate was formed on the top of the liquid, and gradually fell, in flocculent masses, to the bottom of the vessel. After letting it stand for some time, I removed it and washed out the vessel, and placed in it the same quantity of the solution of the arsenite of potash, and passed through it the sulphuretted hydrogen gas, when the same kind of precipitate was formed on the top of the liquid, and fell to the bottom of the vessel in the same way. I now collected the sulphuret of arsenic precipitated from the solution of the stomach, by filtering and drying on a watch glass, and placed it in a tube with the black flux, and attempted to sublime it. After having, however, held the bulb in the flame of a spirit lamp for some time, when light fumes began to escape from the mouth of the tube, and a white crystalline powder collected upon the sides of the tube, (where it was kept cool by a pair of large iron pincers, by which I held it,) the tube began to get red; and before the metal was reduced, it burst, and left a hard grey mass, resembling the slag of a furnace, at the bottom. It had not the metallic lustre, however. The white crystalline powder I supposed to be the arsenious acid.

The opinion given by myself and the other medical witness was, that from the symptoms preceding death, from the post mortem appearances after death, and from the chemical tests, the patient came to her death by poisoning from arsenic. The yellow spots on the mucous membrane of the stomach and bowels we supposed were produced by a chemical action having taken place between the arsenic and the sulphuretted hydrogen gas that always exists in a free state in the alimentary canal, thereby forming the sulphuret of arsenic, and giving them the peculiar yellow color. We also contended that the ulceration and softening of the mucous coat of the stomach and intestines must have been the result of a corrosive poison, as the time from her first symptoms of sickness to her death, was too short for it to be the result of inflammation. Were we justified in giving such an opinion? Or, in other words, was the evidence such as to bear us out in such a conclusion? I would respectfully solicit the opinion of any of the readers of the Examiner

who may be conversant with the subject, on this important case, as the counsel for the defence dwelt strongly upon the insufficiency of the medical testimony. The prisoner was cleared, although it was clearly proven that he had bought arsenic, and had it in the house at the time of his wife's death; that he had been, and was still, living in criminal intercourse with the woman, Turner; that he had frequently threatened he would kill his wife, and that Turner was pregnant by him at the time of his wife's death, and was confined some two months after she was placed in prison. The principal chemical authority, quoted by the counsel, was Cooper's, a work on that subject written some forty years since. The test of the solution of the stomach by sulphuretted hydrogen, exhibited before the Court, has since been confirmed by *Marsh's* apparatus, and the metallic ring formed.

I am, gentlemen, very respectfully,

Your obedient servant,

G. W. Brown.

P. S. It is more than probable that nux vomica was administered first in the coffee at dinner, and, as it did not produce the desired effect soon enough, the man gave his wife arsenic after he came home. Nux vomica was found in large quantities in the house afterwards, and its presence will account for the peculiar appearance on the coffee at dinner.

Port Carbon, January, 1851.

[From the facts submitted by our correspondent, and in the absence of opposing testimony, we have no hesitation in expressing the opinion that a verdict *against* the prisoner, Bertolett, was called for. The woman was undoubtedly poisoned by arsenious acid, administered by her husband, either directly, or through the agency of Turner.—Eds. Examiner.]

Remarks on the use of Bromide of Iron. By Edward Gillespie, M. D., of Brady's Bend, Pa.

Having been practising medicine for some five years past in the the neighborhood of Freeport, in Armstrong county, in this State, where a considerable quantity of Bromine is manufactured, I have been led to a somewhat extensive employment of a ferruginous

compound of this article, the results of which have proved so satisfactory, that they may perhaps be not destitute of interest to the readers of the Examiner. The compound which I employ is a bromide of iron of my own preparation, and this is the only form in which I use the bromine. It has now in my hands entirely taken the place of iodine, appearing to me to meet all the indications for which that medicine has been exhibited, and with much greater efficiency. Indeed, the bromide has become one of my *indispensables* in practice, hardly subordinate in importance to my calomel or opium.

The cases in which I have been in the habit of using it are scrofulous tumours, inflammations of the glands, both acute and chronic, erysipelas, suppression of the menses, tetter, and in most cases where chalybeates are administered. Enlargement of the parotid, submaxillary, or cervical glands, whether from scrofula or other causes, I have never yet failed to discuss, provided they had not progressed to suppuration; and I may speak from an experience of not a few cases, and many of them of long standing. When suppuration does take place, the discharge soon ceases after lancing, and the orifice quickly heals by applying a solution of the bromide over the surface occupied by the tumor, and keeping a small plaster of basilicon ointment on the orifice. My method of using it in cases of tumors is to apply a small portion immediately over the tumor twice a day by means of a feather, and at the same time to administer it internally, commencing with eight or ten drops morning and evening in half a teacup of cold water, increasing a drop or two every day until nausea is produced, (which may be termed the point of toleration.) The dose is then to be reduced five or six drops and continued. This is the invariable rule I lay down for its internal use. I have given it to advantage in cases of felon, where a red and very painful streak would run up the arm, causing inflammation of the axillary glands with general febrile symptoms. Some of these cases present rather an alarming appearance for a time, but have always terminated favorably in my hands by a strict antiphlogistic treatment, and the use of the solution as a local application to the inflamed arm and glands.

Last spring an erysipelatous epidemic raged in a district of the country north-west of this, proving extremely fatal, and causing considerable alarm in the section where it prevailed. It exhibited

quite a preference for the fair sex, nine-tenths of those attacked having been females. The first symptoms were chills, followed by a high grade of fever and sore throat; from 24 to 36 hours after the attack, the throat became so much swollen that deglutition was very painful, and in many cases entirely impeded. The breathing was very laborious. The tongue was also much swollen, so much so as in many cases to protrude from the mouth with an extremely thick black coat on the upper surface. In this stage it was generally called "black tongue." In from 48 to 72 hours from the commencement of the attack, when it pursued its natural course, the ears became red and inflamed, the redness and inflammation extending rapidly over the face, head, neck and shoulders. The eyes became entirely closed, the nose nearly covered by the swollen cheeks, the lips puffed out to an enormous extent, and the head, to use the expression then common, "as big as a bushel." Perhaps an idea may be conveyed of their appearance by likening it to that of persons drowned in warm weather, whose bodies have remained in the water a week or two, with the face and head painted scarlet after being removed. When they arrived at this point they were vulgarly termed "swell heads."

Occasionally the disease would appear on one ear and extend over the face to the median line. When this was the case, one side of the face would be swollen and the other perfectly natural, which gave the a patient very grotesque appearance. It would not remain long in this situation, however, until the sound ear would become red and the disease would soon hasten across the face to meet its companion.

When it did not appear on the skin or could not be brought out by artificial means, the patient generally died in a short time from suffocation. But it could in nearly all cases be brought out by the use of some highly stimulating lotion or the application of a fly blister to the neck. Still the danger was imminent either from sloughing and gangrenous inflammation of the cellular tissue, or a transfer of the disease to the brain. The patient, by external revulsion, was generally enabled to swallow, which of course was a strong point gained, and by the judicious use of internal remedies and proper local applications he now generally recovered. I must not omit to state that I found the free use of the lancet eminently serviceable whenever the state of the pulse required it.

With regard to local applications, I may say that I experimented with a variety of articles. In one case I applied exclusively the acetas plumbi in solution—in another the ethereal tincture of iodine, in another strong mercurial ointment, in another solution of corrosive sublimate, and finally the bromide of iron in solution. The progress of these different applications I watched for a couple of days, the internal treatment being the same in all. The acetate of lead appeared to have no influence on the disease whatever. It progressed as rapidly as though nothing were applied, although the solution was as strong as an ounce to a pint and a half of water, and kept constantly applied by means of muslin dipped in the solution.

The tincture of iodine appeared to do better—it retarded but did not arrest the disease. It was also strong, half an ounce to a pint of ether. The blue ointment I had tried previously in sporadic cases with a certain degree of success, but in this case it appeared to act but feebly.

The solution of corrosive sublimate had no other effect, than to produce violent salivation in fouror five days after its application.

The bromide of iron entirely arrested the disease in forty hours from its first application. I used it in all cases afterwards very successfully, by applying it two or three times per day to the parts affected, and extending it one or two inches over the sound skin, and the constant application of cloths wrung out of a solution of acetate of lead.

I have no very accurate formula for the solution of bromide of iron that I make use of. I put three ounces of bromine into ten ounces of water, then add four penny nails, which are about enough to take up all the bromine. If any are left, after the bromine is all taken up, I take them out, and add free bromine as long as it will be absorbed; if too much is added, I put in a nail or two to take up the surplus. It makes a dark liquid of an acid and styptic taste, which turns brick red when applied to the skin. This is the solution which I use.

[The bromide of iron (which is a hydrobromate of the protoxide) is liable, like the iodide, to partial decomposition from the oxygen of the atmosphere, free bromine being generated, and the sesquioxide of iron deposited. It should, therefore, for internal exhibi-

tion, be protected by saccharine matter. Mr. Dillwyn Parrish, of this city, has made, at our suggestion, a solution of the salt, with sugar, after the subjoined formula:—"Take of Bromine *two hundred grains;* Iron Filings, *eighty-five grains;* Distilled Water, *four and a half fluid ounces;* Sugar, *three ounces.* Mix properly. Dose, ten minims, to be repeated and gradually increased, ten minims containing a grain of the bromide."—Eds. Ex.]

Case of Wound of the Stomach. By Robert K. Smith, M. D. of Darby, Pa.

A singular case has recently fallen under my observation, which seems show, that the stomach may receive a penetrating wound of considerable extent, without symptoms of organic disturbance, and without any escape of its contents into the abdominal cavity.

The case referred to, was that of a negro man, who was stabbed with a dull butcher knife, on the morning of the 12th inst.

I saw the case about half an hour afterwards, and found the wound on the left side, between the seventh and eighth ribs, behind the cartilages, extending backwards nearly two inches, with about four inches of the colon and a large portion of omentum protruding externally.

The omentum was a good deal lacerated; and the intestine fully distended with gas, and so much strangulated at the wound, as to render its enlargement necessary, in order to effect a reduction.

This was done sufficiently to allow the protruded viscera to be replaced within the cavity of the thorax, and to be pushed down with the finger, through the wound in the diaphragm, into the abdomen. I then closed the wound with interrupted sutures, and placed a compress upon it, secured by a bandage around the body.

The pulse was 78 and feeble. Great prostration existed, and, from the examination, I felt confident that there was profuse internal hemorrhage.

The patient complained of thirst, great pain in the stomach,

dyspnœa and faintness; but, from the moment the wound was inflicted, until his death, there was neither nausea nor vomiting.

I saw him twice during the succeeding six hours, and found the change in his symptoms to be, great restlesness, increase of pain, and difficulty of breathing, and a gradual sinking of the vital powers from the hemorrhage; a large amount of which had escaped through the interstices of the wound, and become infiltrated around it. The following morning the pulse was almost imperceptible; no pain; increased dyspnœa; and gradual sinking. He died at noon; twenty-six hours after he was stabbed.

Autopsy.—Upon dissecting up the integuments, a portion of omentum was discovered to have returned through the diaphragm, plugging the wound between the ribs.

Parts of the 5th, 6th, and 7th ribs, were next removed, and a large opening appeared in the diaphragm, filled with omentum. There were probably between two and three pounds of fluid in the thorax, with complete collapse of the lung.

The abdomen was next opened, and the knife was found to have passed downwards, through the diaphragm, into the stomach, through the anterior or superior wall at its cardiac extremity, making an opening, in the organ, of more than an inch in length.

The stomach was full, and around the wound in it there had been some inflammatory action, but not the smallest portion of its contents had escaped into the abdominal cavity.

The peculiarities which this case presents, are the entire quietude of the stomach after sustaining such extensive injury, and the retention of the whole of its contents when so fully distended.

The stab was inflicted shortly after the man had eaten his breakfast, and he drank freely of water and other liquids, up to the time of his death.

The only way in which I can account for the retention, is, that the wound must have been closed, by a part of the returned omentum falling upon it,

Darby, Pa., 28th Jan., 1851.

CLINICAL REPORTS.

Clinic of the Jefferson Medical College. Service of Profs. PANCOAST and MÜTTER.

Number of cases treated, from Sept. 1st to Dec. 21st, as reported, 906; operations 120.

Cases treated from Dec. 21st, to Jan. 18th.

Whole number of cases, 279; operations, 24, viz.:

Cancer of the Breast, 1; Hydrocele, (removal of a portion of the tunica vaginalis,) 1; Strabismus 2; Onychia 1; Nasal Polypus, 1; Fistula Lachrymalis, 2; Hæmorrhoids, 2; Pterygium, 1; Ectropion, 1; Enlarged Tonsils, 2; Elongated Uvula, 1; Fatty Tumor of Scapula, 1; Prolapsus Iridis, 1; Varicose Veins, 1; Polypous Tumor of eye-lid, 1; Hygroma of knee, 1; Removal of a musket ball and several buck-shot from the thigh, 1; Ganglion of Wrist, 1; Section of the Pectineus, 1; Cataract—lens displaced with the needle. Days of operating, 7; there being no clinic on Dec. 25th, and 28th. Average number of patients each day, 39.8.

Clinic of October 9th, 1850.

Cases presented.—Fistula Lachrymalis; Ulcer of Ankle; Retention of Testicles; Osteitis, giving rise to bending of tibia; Scrofulosis; Tumor of back; Wound of hand from fractured glass; Acute Osteitis; Strabismus; Scrofulous Ophthalmia; Polypus of nose; Hypopion; Steatomatous Tumor on arm; Aneurism of Aorta; Pseudarthrosis of humerus, seton introduced between the ends of the bone; Two great toes on each foot, amputation; Caries of Femur; Medullary Sarcoma; Caries of Spine; Tumor on Cheek; Abscess on side of Face, opened; extensive Cicatrix from burn of arm, producing great deformity; Chronic conjunctivitis; Amaurosis; Lithotomy; Total, 28.

CASE 28.—URINARY CALCULUS IN THE BLADDER.

Professor PANCOAST said: The next case to which I shall call your attention, is one of stone in the bladder.

The patient, Mr. J. Messersmith of Lehigh Co., in this State, is one of our upright and respectable Pennsylvania farmers. He is about 56 years of age, of a robust frame, as you may see, easy in circumstances, and has always led, as I learn from his physician, Dr. Hoffman, who was good enough to direct him to me, a very moral and temperate life.

He comes from beyond the lime-stone region of this State, a fact of some interest, as connected with the origin of the stone. He has been suffering for several years with the ordinary symptoms of urinary calculus, and for a few months past has discharged a good deal of blood with his urine. During fits of the stone, brought on, as they usually have been, after walking or riding, the quantity discharged has amounted to a hemorrhage. On this account, partly, and partly on account of the absence of any symptoms indicative of disease of the kidney, we are at once led to infer that the source of the hemorrhage is the mucous membrane of the bladder. This inference is converted into positive proof by the effect of sounding the bladder, for this, no matter how delicately it is done, is followed by bleeding.

On examination by the rectum, I find the prostate gland hypertrophied and large; by use of the sound, I discover that the middle lobe is large and soft, and that there is a deep pouch or bas-fond to the bladder beneath it, in which the stone is lodged. The urethra is apparently healthy.

The stone is a hard one, as it rings when struck with the sound. It lies loose and unattached, as I know from being able to pass the sound between it and the walls of the bladder. I have picked it up with the lithontriptor, and measured its dimensions by the scale which is attached to the outer end of the instrument. If there be but a single stone, it is about an inch long and five-eighths of an inch thick—as by dropping and picking up the stone again in the bladder, I have ascertained these two measurements. It is possible, however, that there may be two calculi, which I have gotten hold of separately. The bladder, notwithstanding the disposition of its neck to bleed, bears pretty well a moderate degree of distention, as I have injected it with six ounces of warm water for the purpose of sounding, a preparatory step of much importance both as regards sound-

ing for the detection of the stone, and the use of the lithontriptic instrument, if we should decide upon crushing the stone in the bladder.

Now, gentlemen, you have the case fully before you, and the patient is at hand, willing to submit to any operation that will restore him the most completely to a state of health. Shall we crush the stone in its place, which I can do without difficulty, and let the fragments be gradually discharged with the urine, or shall we cut him and extract the stone at once? This is a case unlike most that present themselves, where either operation would really be allowable. But in most cases of stone, to a surgeon equally familiar with both plans of operation, one or the other is clearly indicated as the best.

Now you all know, at least such as are attending their second or third course in this institution, the general preference, as suited to the greater number of cases, that I give to the crushing over the cutting operation, on the grand account of its being attended with less hazard to life. Yet it has so happened during the course of the last three winters, that you have seen me operate in this place on six separate cases of stone—three by the cutting and three by the crushing process, and now I have decided on cutting a fourth. Of those cut, two were young boys, one a man of thirty, and this is, as you see, a man passed middle life.

Of the three men subjected to the crushing process, one was twenty-five and the others fifty-eight and seventy years of age. I make these details, lest you should be led astray,—this preponderance of the cases cut over those crushed, being a mere matter of accident; for in private practice I crush four or five times at least, where I cut once. There are rules, however, by which we should determine the fitness of each plan of operation to particular cases, and I will briefly mention such as influence me in the choice.

1st. As regards females. You should cut no female except in a case of urgent necessity. As a general rule the stone is to be broken up in the female bladder; or if it be small, you have the choice instead of breaking it to dilate the short distensible urethra, and withdraw the stone with a small pair of forceps.

I have succeeded without difficulty in breaking up calculi of

the hardest kind in females, for the urethra will admit of the employment of strong and powerful instruments for that purpose. You will see the debris, the result of many of these operations, in the museum. Larger stones may be more readily gotten rid of by crushing in the female bladder than in the male, as there is no deep bas-fond, and no prostate gland to become enlarged, fungous and irritable. You may observe in the museum the fragments of a large stone, which was two and a-half inches in in its long diameter, which I removed many years ago with the most complete success, from a lady at Emerysville, in Chester county, about fifty years of age. It required, however, thirteen successive operations to reduce it to fragments of such size as to be discharged with the urine.

The size of the calculi, therefore, does not influence the choice of operation in the female. They are to be crushed, and I have succeeded in crushing them of almost all sizes. The exceptional cases in the female, in which cutting is allowable, it appears to me, are those in which the stone is of moderate size, and jammed in at the inner end of the urethra so as not to be readily pushed back, or when a rough stone of considerable dimensions has excited so much irritation and thickness of the coats of the bladder as to make that organ utterly intolerant of such a degree of distention by the injection of fluids, as to enable us to open and shut the lithontriptic instrument without injury to its coat. In two cases of this sort I have, however, succeeded in getting a sufficient degree of toleration for the use of the instrument, by injecting two or three ounces of sweet oil instead of water or mucilage.

In two cases of females I have been obliged to perform lithotomy. One was in a child, a case of impacted stone. The other was that of a girl of nineteen, a patient of Dr. Knorr, of this city, who suffered intensely from a stone one inch and three-eighths in diameter, tightly embraced by an intolerant bladder. In both cases I cut from the urethra upwards, towards the symphysis pubis, and closed the sides of the incision as well as I could, after the extraction of the stone, with sutures introduced along the urethra. In both instances I found it necessary to retain an open catheter in the urethra, to prevent the blood, accruing from the wound in the neck, being drawn by the suction of the respiratory movements back into the cavity of the bladder.

The liability to have incontinence of urine follow these operations in the female is the great and serious objection to their performance, and I believe there is no way, if the stone be extracted by an incision below the arch of the pubis, in which it can with any certainty be avoided. The child suffered from this cause to a considerable degree. The older patient escaped with the power of retaining the urine readily for four or five hours, and the escape appeared to me to be owing to the careful closure of the line of the urethral incision by the interrupted suture.

You will perceive from these views of mine, that I am disposed to exclude the high or super-pubic operation which is so commonly recommended in females. For if the bladder is dilatable, I have always been able to crush the calculus contained within it; and if it is not dilatable, the operation above the pubis cannot be resorted to without an unjustifiable risk of injury to the peritoneum.

2nd. In males; the first consideration is the question of age. I believe in children of this sex, it is proper almost uniformly to perform lithotomy.

a. As regards the urethra. It is said by most writers, that stricture in the urethra, great irritability, or even an undilatable condition of the urethra, furnish sufficient cause for the preference of the cutting over the lithontriptic operation. But I have not found it so; I have met with all these obstacles and been able to overcome them. Strictures, if they will not otherwise yield, I divide with the instrument of Dr. Dodd, and then dilate them. If the irritability or undilatability of the urinary canal is not soothed by the gentle use of dilating instruments, by the frequent use of the warm bath, careful attention to regimen and the melioration of the urine by the use of internal remedies, I add to these measures, a slight cauterization of the irritated part with the porte-caustic of Lallemand, and then after a short interval revert again to their use.

b. The internal organs. Upon the condition of the prostate, the bladder and the kidneys, from the age of puberty upwards, should I believe, invariably depend the choice of the kind of operation to be practised. It is therefore necessary to determine their state as accurately as possible beforehand.

If the kidney be seriously involved, and especially if the

symptoms indicate a suppuration of its pelvis on either side, you are in no wise to cut, for the system is too seriously undermined to withstand the shock of the operation and the protracted suffering of the cure. The operation by crushing, is the only alternative, if it be proper to operate at all.

If the bladder be diseased in its mucous coat merely, although freely throwing out mucus, muco-purulent matter, or pus, or acting upon the urine so as to cause a deposit of white gravel on its lining membrane, with the prostate and neck in a tolerably healthy condition, and capable of bearing for a few minutes without much suffering to the patient, the injection of an half a pint or more of warm water or mucilage, and the stone be not excessively hard, it is I believe your bounden duty in all cases to operate by the crushing process. Before and during the course of treatment, general and local measures, such as baths and tonics, acids or alkalies according to the chemical nature of the urine, and the condition of the bladder, may be employed with advantage.

But if the bladder be in a condition such as that first described, or in a worse condition even, so that it will not bear distension, either from the local accumulation of urine, or by injection from without; hypertrophied as to its muscular coat; sensitive to the contact of instruments, and easily excited to contractions which will grasp the sound by its walls; ribbed or columnar, as you may tell by passing the sound over it; or sacculated as you may sometimes discover by the point of the sound falling into recesses—the condition of the prostate, it appears to me, is then alone to determine whether you are to cut for, or crush the calculus. On this subject, which has given rise to much conflict of opinion among writers, I entertain somewhat peculiar opinions, the result of a good deal of experience and careful observation. If the prostate be healthy, firm, and but little or not at all enlarged, it is, I think the duty of the operator to crush; but if it is enlarged generally, and especially in its middle lobe, and as is commonly the case under these circumstances, bleeding after the use of the sound, and with a deep bas-fond behind it, it is I believe better to cut. It might seem to you that the large size of the prostate gland should offer a counterindication to lithotomy, and render lithontripsy the more

eligible operation. But you must recollect that the large prostate gives a deep bas-fond, and the fragments of the stone will therefore not so readily escape, requiring to be minutely broken—which would necessitate the frequent use of the lithontriptor. The irritation arising from this, and the motion of the fragments in the bladder, will tend to produce so much vesical irritation as to endanger and perhaps to destroy life. If the bladder be sacculated, these fragments by lodging in them might, with their sharp angles, excite ulceration through the walls of the organ. In such cases the operation by crushing is attended with as much, perhaps even more danger, than that of lithotomy, though it is not so immediate, nor so directly traceable to the operation. You will, therefore, occasionally meet with cases of stone in old men with such derangement of the bladder, prostate and kidneys, that it will be most judicious not to attempt either form of operation.

The enlargement of the prostate is, per se, a strong reason with me in favor of lithotomy. It is in itself a disease over which our medicines have but little influence. It is said by Lallemand that the most effectual method of reducing its size and relieving its distressing symptoms, is to divide it freely, and for this object alone he has made the bilateral cut, as in the operation for stone. Of this I am well assured, that I have seen it reduced greatly in size and cease to cause much inconvenience after lithotomy. I show you two calculi of near an inch in their long diameters, which I removed about two months since from an aged gentleman near Mount Holly. In this case I decided to cut in consequence of the large size of the prostate, and made the bi-lateral incision of Dupuytren. The subject was spare, yet so large was the prostate that I could barely, after the incision, reach its top with my finger, and was obliged to use the curved forceps to grasp the stones from the bottom of the bladder. Yet the recovery was most rapid, as the gentleman was riding about the country again in four weeks without the slightest inconvenience on the side of the bladder.

I have now given you briefly, the more prominent reasons that weigh with me in the choice of operation, as applied to particular cases of stone.

Having decided to cut for stone, which of the three routes

described in the books shall we select through which to make our entrance into the bladder? Through the linea alba into the front part of the body of the bladder, as in the super-pubic operation; through the rectum and prostate, as in the recto-vesical; or by the perineum?

The first appears to me indicated only in those cases, very rarely met with, in which there is a stone too hard to be broken, and too large to be withdrawn under the arch of the pubis. The second seems to me indicated solely in the exceptional cases where the stone is lodged in the sinus of the prostate, and not susceptible of being pushed back into the bladder. The perineal is, by common consent, the most generally appropriate form of operation, and to this I shall restrict my remarks. Of these we have two forms, both of which require to be studied; the lateral and bi-lateral. In neither of these do we cut the bladder itself, we merely open a way into it by cutting through the prostate. This organ, if it be healthy, is very distensible, and requires an incision of but little width to allow of the withdrawal of a calculus of moderate dimensions, and if it be enlarged and hard, it admits of a wide incision.

In the lateral operation we cut one lobe of the prostate merely, and the left, because it is most convenient to use the right hand.

In the bi-lateral we divide both lobes. Each of these are employed by different operators as the exclusive mode, for all ages and all states of the organs. But each one has its peculiar fitness for particular cases. The lateral is most speedily done and is the most appropriate when you have a healthy prostate, a thin perineum, and a small stone. It is especially to be preferred in cases of children, where the prostate is yet rudimental.

To perform this operation I require but three instruments: a curved staff, with a deep groove on its convex part; an ordinary French scalpel, with a long handle; and a pair of forceps curved downwards near the end of the blades. The anatomy of the parts through which you have to cut you already know, as I have prepared you for the operation of to-day, by demonstrating the structure of the perineum in an evening lecture. I distend the bladder moderately with water, introduce the staff and touch the stone; my object is then to open the membranous part of the urethra, without cutting the bulb, the improper division of which

is the common source of arterial hemorrhage after this operation. But two strokes of the knife are required to reach the membranous part of the urethra. The knife should be entered on the raphe of the perineum, about midway between the root of the scrotum and the anus, and drawn down, cutting deeper as it descends, to a point midway between the tuberosity of the ischium and the middle of the anus. The second stroke should be made by entering the knife about five-eighths of an inch below the top of the first, (as this will clear the bulb,) and drawing it down, cutting deeper as we descend, to within the same distance from the lower end of the first incision. By pushing the finger in at the middle of the wound you will now feel the staff below the bulb, covered by the membranous part of the urethra. Sink the nail of the left forefinger into the groove of the staff, conduct the point of the same knife along the nail, cut through the wall of the membranous part of the urethra till the knife grates freely in the groove of the staff; then hold the knife firmly against the staff, with the edge directed diagonally towards the left side. Take, now, the staff from your assistant, with your left hand, draw the handle downwards towards the thighs, and the knife, almost without a feeling of resistance, will be carried into the bladder.

The prostate is now divided, and the water will gush out through the wound. Before withdrawing the knife I raise the handle a little, so as to nick a little deeper the vesical end of the prostate, which is its most unyielding part. Both staff and knife are then to be withdrawn, the finger passed through the wound into the bladder, bent about a little, so as to dilate the cut in the prostate, the forceps conducted along it into the bladder, the stone seized and withdrawn. This is, I am convinced, the neatest, surest, and, what is of less importance, the speediest mode of making the lateral cut for stone.

In the two children whom many of you saw me operate on in this place, the whole operation occupied, in the one case, a little less, and the other a little more, than a minute. The only point in this process different from the common operation performed with the knife, is, that I draw down the handle of the instrument as if I were using the gorget, and let it carry the knife in, which is merely firmly held with a slight pressure forward, up

against the curve of the staff. The prostate may be very safely divided by pushing in the gorget a sort of sloping chisel, as you see, or with the single lithotome-caché, which makes the cut as it is withdrawn by its two blades, which have been opened in the bladder.

Both of these instruments, however, require the previous use of the knife to open the membranous part of the urethra.

The bi-lateral operation is that which I shall perform to-day. This is, I believe, by far the most appropriate and least hazardous when the stone is large, the perineum deep and vascular, or the prostate enlarged and hard. You cut by this both lateral lobes of the prostate, drain it of its fluids, so that each lobe may be subsequently expected to undergo a sort of atrophy by which it will be reduced more nearly to its natural healthy dimensions, and you get a free opening directly at the bottom of the bladder, which gives you ready access to the stone, and leaves (a most important matter) a free outlet to the urine, which is a great safeguard against the risk of urinary infiltration and abscess. You rarely divide a vessel that requires a ligature; it is scarcely possible that you could cut beyond the boundaries of the prostate so as to endanger the pelvic fascia, or wound the prostatic plexus of veins which are without valves, and, when cut in old men, bleed copiously, from their direct connection with the vesical plexus; or injure the pudic artery; all of which is more or less likely to happen in the lateral operation, especially under the use of the gorget or single lithotome-caché.

We will now proceed to the operation. The patient will have the bladder moderately distended by the injection of warm water through a catheter, have the staff, which is deeply grooved on the back part, introduced, and inhale ether. The hands and feet will be secured together, as is ordinarily done in these operations, and the pelvis raised on a folded blanket, placed on the end of a narrow table. We have taken the precaution to have the pouch of the rectum emptied, by an injection, so that it may not come in the way and be cut.

When the patient had become insensible under the use of the ether, the operation was commenced by making an incision with the scalpel round the anterior semi-circumference of the anus, a half an inch in depth, and five-eighths of an inch from its margin.

This was deepened again by the use of the knife, in the direction of the membranous part of the urethra, cutting just beneath the transversales perinei muscles, so as not to divide any artery of consequence. After this second use of the knife, the staff could be felt in the membranous part of the urethra; this was then divided over the groove of the staff, and the double lithotome placed with its point in the groove, and passed into the bladder. The staff was then withdrawn, and the lithotome, turned with its concave surface downwards, was drawn out horizontally with its two blades expanded, dividing both lobes of the prostate in its course. The forceps was then introduced, and two calculi of the size above indicated, withdrawn from the bladder. The operation occupied but little more than two minutes, and the patient was scarcely conscious of its performance. There were no arteries to be tied. The patient was then placed in his bed in a recumbent posture. A large sized gum catheter was introduced through the wound, and retained for three days, to ensure a ready escape to the urine. An anodyne and diaphoretic mixture was administered at regular intervals, so as to keep the patient for a couple of days steadily under its soothing influence. No fever, and but little pain or irritation followed. On the fourteenth day after the operation, the wound was so nearly closed, that the patient walked into the clinic, and was presented to the class. In a week more the cicatrization was complete, and in twenty-three days from the time of the operation, he felt himself so completely recovered, as to undertake his journey home, by the stage, a distance of forty miles, which he accomplished in one day, and without any serious inconvenience.

Summary of the Course on Demonstrative Surgery, in the University of Pennsylvania, from Jan. 25th to Feb. 22d.

(Reported for the Examiner.)

In continuing our report of the cases shown in the Demonstrative Surgical lectures of this institution, we shall be guided by the principle laid down in a previous paper, (Examiner for Feb., 1851,) and limit ourselves to such of the patients as present points either of novelty or general interest.

Large Hydrocele of the Tunica Vaginalis Testis.

A man upwards of 65 years of age, laboring under a large scrotal tumor of the right side, was brought before the class Jan. 25th, by Dr. Smith. As an apparently similar tumor had been shown by Dr. Horner on the previous Saturday, much stress was laid by the lecturer, on the means of diagnosis. This patient was believed to have a pure hydrocele, its existence having been rendered almost certain by an examination of the tumor with transmitted light. To effect this, the patient had been placed in a dark room, the tumor firmly grasped by one hand and rendered tense, whilst the other was placed breadth-wise on the top of the swelling, in order to cut off the rays of light from the eye of the observer. A lighted candle being now held by an assistant, on the opposite or sound side of the scrotum, and as near to the part as is possible, the contents had the appearance of a thin fluid, of a clear translucent character, presenting a light pink color, similar to that produced by looking at a light whilst the fingers are interposed between it and the eye. The testicle being a more solid body, could be distinctly seen like a dark mass at the posterior part of the tumor. When in such tumors light is not thus transmitted, (as was the case in the patient shown last week,) there is good reason to anticipate the existence either of hernia, hæmatocele, sarcocele or a thickened tunica vaginalis. The test, therefore, was regarded by Dr. Smith as a valuable one, and the more so, as long experience had not impaired its value.

On tapping the patient Dr. S. drew off upwards of three pints of clear, straw-colored serum; after which diluted tincture of iodine (iodine one part, water two parts,) was injected, and a few threads of silk passed through the cavity, in order to prevent the re-accumulation of the fluid before adhesion could occur. The man subsequently did well.

Bad Hæmorrhoids—operated on by Dr. Horner's plan.

On the removal of the last patient, reference was made by Dr. Smith, to a case of severe hæmorrhoids, accompanied by prolapsus of the rectum, on which he proposed operating. In explanation of the means to be employed in this case, the lecturer referred to the two well known methods of applying the liga-

ture. 1st. That of the double waxed thread, introduced through the centre of the pile, cut into two pieces, and then one half tied on each side of the tumor ; and 2d. The destruction of the hæmorrhoids, by the double canula and wire ligature, as practised by Dr. Physick. In both instances strangulation was only indirectly accomplished, the circulation through the tumor being cut off, by constricting the vessels through the surrounding tissue. From the density of the part, perfect strangulation in this way was by no means easy, and the patient often suffered intensely, from the nerves of the skin, &c. being included within the ligature. For many hours after these operations, he was therefore left in a most miserable condition, suffering agony such as could only be appreciated by those who had witnessed it. Tetanic and other convulsions, were reported to have occasionally ensued, and, in more than one instance, the surgeon had been compelled to remove the ligature, in order to avert death. Petit, Kirby, and Brodie, all had stated the dangers which sometimes ensued on these operations, and Petit reported the death of one of his patients within forty eight hours after this application of the ligature. Most surgeons were therefore so well acquainted with the danger referred to, that caution in the strangulation of hæmorrhoids was always urged.

In the plan proposed by Dr. Horner, and published in the American Journal of Medical Sciences for October, 1842, most of the suffering, and all such dangers were entirely removed, and as the Dr. had now operated in this manner more than thirty times, as the lecturer had assisted him in a large proportion of the cases, and also repeated the operation several times in his own practice, he could confidently recommend it. Out of all the cases that he had known, but one, (a cavalry officer) had required its repetition, and in most instances the tumors and ligature were removed, in five hours after the operation, without causing any subsequent bad symptoms.

In referring to the structure of hæmorrhoids, as well as to the objects of the operation, Dr. Smith expressed the belief, that in most instances the production of the tumors was due, not only to a varicose condition of the plexus hæmorrhoidalis, &c., but also to the extension and protrusion of these vessels, covered by the mucous membrane of the gut, in the expulsive efforts consequent

on defecation. • In other instances, and especially in external piles, the tumors were, as he thought, simply the cellular structure of the part, into which blood had been effused from a ruptured vein; thus creating a discolored, semi-solid, or fig like tumor, which was covered either by the skin of the anus, or by the mucous membrane, according to its position. If the coverings of either of these kinds of tumors became ulcerated, subsequent distension of the vessels was likely to induce hæmorrhage. The patient to be shown to-day has suffered severely in this way; he is now nearly anæmic, and has open hæmorrhoids, which often bleed even without the efforts of defecation. The tumors in him are of considerable size, of a somewhat vascular structure, (becoming livid when he strains,) and are covered solely by the mucous coat of the gut, being of the internal kind. From the relaxed condition of the sphincter ani, and from serous infiltration of the sub-mucous cellular structure, he has also some prolapsus of the rectum.

As the hæmorrhoidal veins lie in the cellular coat, or between it and the mucous membrane, it is easy to strangulate them perfectly, if an incison is made through the skin, &c., at the verge of the anus, previous to the application of the wire ligature. This is readily accomplished by the operation proposed by Dr. Horner, and will be pursued in this patient.

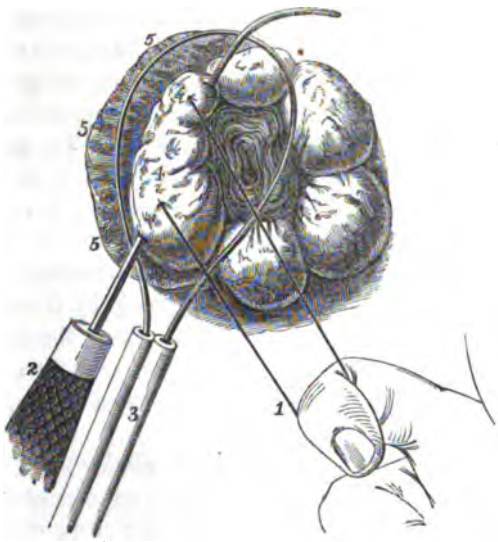
The first step in the operation, after the protrusion of the tumors by the patient, is the introduction of a strong silken ligature through the largest tumor; this being tied into a loop, and held by an assistant, prevents the retraction of the hæmorrhoids within the gut.

Second. The transfixing of the base of the same tumor by a long and nearly straight tenaculum, in order to elevate it and draw it off from the sphincter ani muscle.

Third. The division by a scalpel, of the skin at the base of the tumor, or at the line where the mucous membrane merges into the skin of the anus, and the free dissection of the pile from the inner circle of the fibres of the sphincter ani.

Fourth. The application of a wire ligature and canula, in such a manner that one half of the loop is passed to the bottom of the incision made on the pelvic side of the pile, whilst the other

is pressed up the gut on the inside, until it reaches above the upper portion of the base of the tumor.



Explanation of Cut.

The drawing which was taken from life, shows the appearance of the tumors &c., together with the steps of the operation immediately previous to tightening the ligature.

1. The silk ligature held by the assistant.
2. The tenaculum in the largest tumor.
3. The wire ligature and canula.
4. The principal tumor.
5, 5, 5. The incision by which the tumor is dissected off from the inside of the sphincter ani muscle. The outer half of the ligature is seen, as placed in the incision. The effect of tightening the ligature is to enclose No. 4.

On drawing the ligature very firmly, the veins will be constricted on the outer side, through the cellular coat, or between it and the muscle; and on the inner side, through the mucous membrane. The tumor therefore, very soon becomes livid, and the strangulation is so perfect, that in five hours both it and the ligature may be removed by excision, without hæmorrhage. The thread left in the tumor, renders its excision easy; after which the

loop of the wire ligature can be readily slipped off the stem-like portion.

The steps taken immediately after the operation, are the removal of the tenaculum; the introduction of a piece of spread cerate into the incision, so as to separate the outside of the tumor from the incised parts, to which it would otherwise be disposed to unite; and the administration of an anodyne enema (laudanum ʒj for an adult). For the first 24 or 48 hours, it is also often necessary to employ the catheter. The wound usually heals without further dressing. If the tumors are small, two or three of them may be included in the same operation.

In no instance within the knowledge of the lecturer had there been subsequent hæmorrhage, phlebitis or other bad symptom, whilst the contraction of the cicatrix usually produced sufficient constriction about the anus, to relieve the tendency to relaxation of the part, which is so often co-existent with the disease, and doubtless tends to its reproduction.

The patient being then etherised, was operated on by Dr. Smith, in the manner stated, and in twelve days was able to walk several squares to his home. Although in this, as in other cases, the hæmorrhoids are found all around the anus, the performance of the operation on one side, generally effects their cure.

Psoriasis Inveterata.

In connection with the treatment of a patient laboring under this complaint, Dr. Smith stated that for some years he had seen much benefit in such cases, from the use of the tinctura cantharidis, as proposed by Biett. He gave it in doses varying from ten to fifty drops three times a day, and at the same time employed Hydrargyrum Prot. Iodidum, as an ointment, in the proportion of grs. xii. to the ounce of lard.

Ulcerated Cancer of the Mamma.

On the 1st of February Dr. Horner brought forward a lady laboring under ulcerated or open cancer of the right mammary gland, of two years duration. This patient had been under the care of Homœopathic practitioners for many months, but finding that she rapidly grew worse, had recently sought better advice.

The breast now was flattened and firmly adherent to the pectoral muscle; presented an ulcer of considerable size, with thick everted edges; sanious pus; wrinkled and contracted skin, enlargement of the axillary glands, and all the well known signs of advanced cancer. An operation being therefore unadvisable, local and constitutional treatment were resorted to, and she was directed to dress it constantly with the powdered carbonate of iron and dry lint, and to take Vallet's mass. grs. ij. twice or thrice daily. This treatment was thought to offer the best means of arresting the progress of the disease, and had formerly been employed to a considerable extent by Cline, Justamond, and others.

Sufficient time has not yet elapsed to test the result in this case, but in some others in the city, the chalybeate course has proved decidedly beneficial, especially in the early stages of the complaint.

Cases of aneurism of the aorta just above the heart; of fatty tumor of the shoulder; caries and removal of the 3rd metatarsal bone, &c., were presented Feb. 8th, but require no further notice.

Section of the Frontal Nerve for Neuralgia.

Feb. 15th. Dr. Horner brought forward a female who had labored for five or six months under severe neuralgia of the forehead and eye, believed to arise from disease of the branches of the frontal nerve. This patient was about 35 years of age, and had been treated by all the usual remedies, as blisters, quinine, iron, &c., without benefit. It had therefore been decided to divide the main trunk of the nerve, by a sub-cutaneous incision, at its exit from the supra-orbitar foramen. Accordingly, the Doctor introduced a narrow sharp-pointed knife, flat-wise beneath the integuments, a little to the external side of the supra-orbitar foramen, and passing it close to the cranium, turned its edge forwards so as to cut from behind, to near the surface of the skin; then turning the blade again upon its side, withdrew it at the point of entrance, the puncture being immediately closed. Directly after the incision, the patient declared herself free from pain, and that sensation in the part was destroyed. The necessary division of the supra-orbital artery, caused slight hæmorrhage, but it readily yielded to the pressure of a bandage.

Club Foot.

Dr. Horner also presented a child with double club foot, (varus and pes equinus,) which had been treated by Dr. Smith, by mechanical means, and subcutaneous division of the tendo-Achillis, three years since. The object in showing this case was to call attention to the necessity of continuing the use of the shoes, until the tarsal bones were fully ossified—probably about 16 or 18 years of age. This child's foot appeared perfectly well when the shoes were on, and it ran about without difficulty, being very active, yet on the removal of the apparatus, although the soles were flat, the child was decidedly pigeon-toed.

Refracture of the Leg—to relieve a Deformity.

On the removal of the other patients, Dr. Horner presented a young man from the country, who, twelve weeks since had received a fracture in both bones of his leg, in jumping from a railroad-car, whilst it was in motion. For some time after the accident the leg appeared straight, but subsequently was found to be very much out of line, projecting anteriorly, the limb being shortened about an inch. Fortunately for the patient, although there was a large amount of provisional callus, the union was not perfect, the fracture yielding on the application of force. It was therefore determined to fracture the callus and endeavor to give the man a more useful limb. Accordingly the patient was partially etherised, and a thickly padded splint applied to the back of the limb, from the seat of fracture up to the pelvis. Two splints also well padded, were then fastened to the sides of the leg so as to reach from a short distance below the fracture nearly three feet beyond the heel, and the limb being brought to the edge of the table the foot was forcibly bent backwards, and the fracture reproduced, by carefully acting on the side splints as simple levers. The limb being thus straightened, was then confined in splints, and the patient has now every prospect of recovery with a good leg. No fever or other bad symptom supervened on the operation.

Rare dislocation of the Femur.

On the 22nd of February, Dr. Horner brought forward a man laboring under a dislocation of the head of the os femoris *in front*

of the spinous process of the ischium, (or just above the tuber ischii, between it and the spine,) of six weeks standing. After applying two sets of pullies, one to make extension, and the other vertically, so as to lift the head of the femur over the prominent edge of the acetabulum, the patient was most happily relieved, and the bone replaced in its articulating cavity. The symptoms, &c., of this case offered so much that seems worthy of record that we shall reserve a full account of them for a future paper. A case of encysted tumor of the ham, resembling popliteal aneurism; one of paralysis of the flexor muscles of the forearm, from the patient having slept with the arm under his head; one of large goitre; one of hygroma of the lower eye lid; and one of fungus of the testicle, were also presented, but were reserved for future treatment from the want of time on this occasion.

Cases from the dispensary practice of Pennsylvania College. Reported by Mr. H. J. RICHARDS, *Clerk of the Medical and Surgical dispensary.*

It cannot be expected that in the ordinary routine of a Collegiate dispensary practice, in a field so well gleaned as this, that many cases occur of sufficient interest to merit the attention of the practical community. If this were so, it would materially impair the usefulness of the institution, as an elementary system of practical instruction; as this object can only be obtained by presenting to a class the most ordinary and frequent forms of disease that we are called upon to relieve.

Nevertheless, the register of a given number of cases cannot fail to offer some pages of sufficient importance to the profession to justify their presentation. The cases hereto annexed, have been selected chiefly with reference to some special points of interest, which it is believed they possess. Case 2d, deserves attention from its rare occurrence.

The slimness of this, our first report, is accounted for by the statement, that previously to the present session, the proceedings of the Dispensary had not been recorded, and by the omission of the cases of operative surgery. The latter, embracing some pe-

culiar plastic operations, have been reserved for the next month's report.

The duties of the medical dispensary are discharged by the Professor of the chair of Practice—Dr. Darrach. The prescribing day is Saturday, at 3½ o'clock, P. M.

Case 1.—A sequelum of scarlatina simplex in the form of a chronic superficial ulceration, extending over the entire anterior surface of the leg in a girl of 13 years of age. Successfully treated by elevated position of the limb, cold absorbent poultices encased externally in silk oil cloth, and subsequently by dry rye meal.

The child had had an attack of scarlet fever, in Ohio, in 1843, at the age of 6 years. As a sequelum on the first week, a subdermal fibrinous transudation occurred, and as its consequence the above mentioned cutaneous affection. This on examination was found to consist of a chronic hyperemia of the chorion, studded with innumerable pin-hole ulcerations of the derm. Its existence has been seven years, inducing chronic œdema of the limb, with general indisposition, and hazarding chlorosis at the appropriate revolutionary period of life.

The patient was confined to the recumbent position—the left lower limb elevated, and the ulcer covered with a cold absorbent poultice externally cased in silk oil cloth. In two weeks the minute ulcerations healed, the abnormal exaltation of temperature and consequent distress ceased, and the redness lessened. In order to establish an epidermis, the dry application of rye meal was substituted for the cool, moist dressing, and after another fortnight, she was perfectly recovered.

The basis of the difficulty in the case was, most likely, struma; and had cod liver oil been at an early period administered, the distressing chronic hyperemia and ulceration would not probably have occurred.

Case 2nd.—W—— L——; presented, Dec. 21st, 1850, æt. 21, pedlar. Spare habit, lymphatic temperament; has been of intemperate habits; pulse and functions of the digestive tube natural; cutaneous exhalation deficient; breathing laborious, attended with pain in the side after exertion; mottled reddish brown discoloration of the skin upon the anterior and posterior aspects of the trunk, extending partly over the upper extremi-

ties, and prolonged over the groin and thighs. The color in some places was uniform—at others it presented isolated patches of dead, white skin, in striking contrast with the liver-colored deposit. The white islet-like patches are the results of the total destruction of the pigmentary substance, in the second stage of the disease. Are not the instances occasionally reported of the metamorphoses of negroes into whites, precisely similar in character; the gradual and irregular bleaching process being exhibited in greater contrast upon the dark skin of the former?

This complaint is figured in Mr. Wilson's splendid illustrations of cutaneous diseases, recently published, as chloasma or liver-spot. It is a diseased condition of the chromatogenous function resulting in an *alteration* of the pigmentary deposit; this serving to distinguish it from those diseases whose prominent feature is an exaggeration of the natural redness. The particular disease with which it is likely to be confounded, is Pityriasis, and the practitioner is aided in forming this erroneous diagnosis by the unfortunate nomenclature of Willan who has described it as Pityriasis versicolor. In addition to the above distinction, it is remarked by Mr. Wilson that "in chloasma there is no primary desquamation of the epiderma; and when desquamation does occur it is *mealy*, or foliaceous. In Pityriasis, desquamation is a prominent character; and the separation of the epiderma occurs in furfuraceous scales. In chloasma, again, the elevation of the surface is very slight and the lines of motion are but little deepened; while in Pityriasis, they are strongly marked and sometimes to the extent of producing chapping of the skin and bleeding."

The causes of this disease are obscure. It is scarcely necessary to put in a caution against the error of inferring from the vulgar name an analogous diseased condition of the hepatic function. The prevalent disposition to regard all eruptions of the skin as of syphilitic origin, must be guarded against. It is known to be associated with uterine irritation in women; and will be recognized as not an unusual symptom in pregnancy. In this instance exposure to the sun after bathing was the supposed cause.

The treatment pursued in the present case was the alterative plan, adapted to the vast majority of these cutaneous affections.

Solution of the arsenite of potassa as the general means; a lotion of potassii sulphuretum, as a local alterative. The case is progressing towards a cure.

Case 3d.—A healthy looking male child, æt. three years, was presented, suffering under palsy of the lower limbs. This was preceded, as was learned by the child's history, by general paralysis. The various functions of the nutritive organism were unaffected; appetite usual, nutrition normal, growth unimpeded, and no evidence existed of any organic lesion of the spinal cord or ganglionic system. *The urine upon examination presented no evidence of an excess of phosphatic deposits.* The lower extremities had their full contour, although from disease they had become flaccid. The affection could not be traced to any former complaint of sufficient gravity to rank as a probable cause. It was therefore treated with entire success as a case of spinal adynamia. The ammoniated copper, gr. v., one hour after each meal, at first provoked nausea, but tolerance having been established, its tonic and alterative property was most satisfactorily manifested.

Case 4.—Margaret R———, æt. 2 years, with an affection of six months standing, manifesting the following alarming symptoms—cataleptoid spasms unaccompanied with pain, lasting about five minutes, occurring about once in the month, during which time respiration is almost entirely suspended. In the intervals the child is irritable, sleepless, and liable to a seizure from exposure to any unusual influence, as fright or emotions of a lighter kind. Nothing could be discovered to shed light upon the pathology of this singular affection, involved in the cimmerean obscurity of this class of nervous diseases. An interesting question suggested by the late views of Dr. Marshall Hall, upon the diastaltic nervous system, arises here. Are children who survive these severe forms of convulsive affection, peculiarly apt in remote years to become the subjects of epileptoid affections?

The case was entered as one of spinal irritation, affecting especially the respiratory tract. Absolute rest, and exclusion of any unusual excitement, with attention to the bowels, were enjoined.

BIBLIOGRAPHICAL NOTICES.

A Practical Treatise on Dental Medicine, being a compendium of Medical Science, as connected with the study of Dental Surgery. By THOMAS E. BOND, A. M. M. D., Professor of Special Pathology and Therapeutics in the Baltimore College of Dental Surgery. Lindsay & Blakiston, Philadelphia, 1851.

Professor Bond has here produced a work invaluable alike to the physician, the medical student, and the dentist. To speak in terms of the warmest praise and commendation of this volume,—of its matter and manner,—its evidences of learning, and yet of careful adaptation to the wants of the student, is to give but an imperfect estimate of its claims to respect and gratitude from medical men, and especially dentists; for the author has stepped aside (we had almost said *descended*, with a conscious sense of the injustice dealt out to dentists and dentistry,) from the path of his legitimate duties, and the exalted field of research applicable to his practice as a physician, to prove and explain the important connection existing between a neglected speciality and its parent science. His book is calculated to simplify the history of their mutual dependence, and the task has been performed with such a master pen, as must produce great good t othe representatives of both professions.

The frank physician who reads this volume will necessarily acknowledge with some self-reproach, that he has overlooked important knowledge, and relatively important duties: and the dentist will feel with pride that he has found a friend who appreciates, and sympathizes with, his department of science—one who is competent to teach him valuable truths that govern the principles of his art. The work of Professor Bond is destined, we trust, to strengthen in the minds of professional men, the true affinity subsisting between general pathology and that which is special of the teeth: and in this nearing of one branch to the main tree, may we not hope to perceive also a nearer approach of sympathies between the good and sensible men to be found in the two professions—physician and dentist.

The useful and available knowledge in these 324 pages, from a clear and gifted mind, embraces every fundamental principle applicable to a medico-dental education; and the author, by furnishing this basis for the studies of the young dentist, has done much towards affording that opportunity of good preparation which may result in accomplishing his own just wishes. When speaking of a great surgical operation successfully executed by a distinguished dentist of our country, he says:—"It is the more worthy of notice here, as having been performed by a dentist, who thus furnishes a model of what we would have a dentist to be. Not a mere mechanic, employed to repair the teeth, or, if necessary, to extract them—but an accomplished physician and surgeon, who, while devoting his attention peculiarly to the teeth, is prepared to undertake the treatment of adjacent parts, however formidable and complicated their diseases may be."

This high standard of ability demanded by Professor Bond for the dentist, and of which he justly cites Dr. S. P. Hullihen as an example, may not, however, be readily reached in the large cities, as the professions are now divided; we do not say it as an excuse for ignorance, but as a cause for neglect on the part of the dentist to practice the general surgery of the mouth and surrounding parts—operating for hare-lip—diseases of the palate, tonsils, &c. &c.

For the same reason that medical men often extract teeth and relieve toothach in country practice, where a reliable dentist is not to be had, so the accomplished dentist in remote places, where good surgeons are not accessible, may very properly perform the operations of general surgery—always supposing he has the right given by a diploma of M. D. from a medical school. The physicians of the cities do not meddle with the duties or prerogative of the dentists—and it is but just, as well as for the best interests of the community, that this feeling should be reciprocal.

It may be safely averred, and without invidious feeling, that the general surgeons or medical men of our large cities, would regard such practice by the dentists as encroachments, perhaps impertinent ones, upon their province, and even the successful operations would have no tendency to decrease the jealous assumption of superiority, too common among physicians towards

dentists. We all know there are some of them, who, while occupying high rank professionally, are far from being great men in just or generous impulses of mind or heart.

But the fearless justice of Professor Bond is an exception to this rule, and is no less commendable, than his true discrimination; he does not hesitate to give honor where honor is due—even though Mr. Liston and his editor both stand in the way. He has done justice to Dr. Mott, with reference to his being the first who successfully amputated the lower jaw at the articulation; and to Dr. S. P. Hullihen, of Wheeling, Va., for a no less difficult and original operation, which proves him to be, says Dr. Bond, "*one of the best surgical operators in this country.*"

The time will perhaps come when such models will be imitated, and when *general* surgeons will be less unjust and ungenerous to *special* ones, *even though they should be dentists*; then we may realize the blessed state of things proposed for dental education by Professor Bond. But it is not likely to be until after the public, or its sensible portion, ceases to countenance *self-made* dentists—dentists metamorphosed spontaneously from broken down watch-makers, silversmiths, adventurers, or blacksmiths; and when the distinctions between mercantile and professional occupations are widely felt, and made to affect the dentist—when moral character and gentlemanly habits are demanded as much in the performance of operations on the teeth, in the dentist's office, as in the sick room by the bed-side of a suffering patient.

Trading in teeth and tools would seem now to be considered as much the evidence of a surgeon dentist, as chartering or freighting a ship, the sign of a merchant; and we cannot sufficiently express our grateful and respectful approbation of the correct and far reaching sentiment conveyed by Professor Bond in the preface to the book we have attempted to notice.

He says, "The Baltimore College of Dental Surgery was organized with the design of teaching dentistry as a regular branch of medicine, in which relation only, *it can be regarded as a scientific pursuit, and the practice of it esteemed a profession.*"

We earnestly desire that the *design* may result in establishing the important and true distinctions the Professor had in view, but we have been compelled to doubt, whether the establishment

of such separate institution, for the *specialities* of medical science would not ultimately affect unfavourably the *only* relation in which dentistry "*can* be regarded as a *scientific pursuit*, and the *practice of it a profession.*"

But we will not be tempted here to enter upon the discussion of the tendency of dental colleges—a fruitful and delicate question, about which we have thought deeply and disinterestedly. We only desire now to approve, and recommend warmly and sincerely, the valuable work given to the profession by Dr. Bond, and we are confessedly unable to do it all the justice, with our pen, which we feel that it deserves.

E. B. G.

First Principles of Medicine. By ARCHIBALD BILLING, M. D., A. M., F. R. S., formerly Professor of Clinical Medicine and Physician of the London Hospital. *Second American, from the revised and improved fifth London edition.* 8vo, pp. 246. Philadelphia, Lea & Blanchard, 1851.

The merit of this little book may be considered pretty well established, after five London and two American editions, within the space of twenty years. And it is certainly not surprising that so spirited a glance at general pathology, combined with an excellent therapeutic analysis, should have taken a hold of the profession. It hardly, however, deserves place as a systematic treatise on the 'Principles of Medicine': although Dr. Billing flatters himself that, in his later editions, he has shaped his work to this end. We suspect that it will continue, as he first found it to be, "more pleasing to fully educated men and men of experience, than to the tyro." To the reader of the former class, however, who has already studied the principles of medicine, a suggestive, original work like this, stored with practical facts, must always be of great value and interest.

A subject of general criticism from the first edition of this book, has been the absence of a table of contents, and of the usual division into chapters and sections. These useful adjuvants the author, we regret to say, persists in discarding, through all his editions, with the exception of an index which he has added

to the fifth, in deference to the wishes of others. Perhaps the omission is to some extent a key to the character of the book—in the facility which it affords to the discursive style in which the author indulges.

One of Dr. Billing's points in his opening or theoretical observations, is the cause of the *first* sound of the heart, which he affirms to depend, like the second, on valvular contraction. Considerable space is devoted to the discussion of this topic, but we believe that Dr. B. stands nearly alone in denying the agency of muscular action in producing the first sound of the heart. The received opinion is, undoubtedly, that which ascribes this sound chiefly to muscular contraction.

Much the most valuable portion of the 'Principles,' is devoted to the examination of therapeutic agents. They are noticed under the division into stimulants, sedatives, narcotics, and tonics; and the author here goes far toward fulfilling the anticipations held out in the preface to one his editions, "that it will be found to contain the essentials of the treatment of disease." If not a complete 'guide to clinical practice,' the book undoubtedly presents a very sound and original train of reflection on the subject—extremely well condensed—which cannot be read without much profit and interest.

Review of Chemistry for Students. Adapted to the courses as taught in the Principal Medical Schools in the United States. By JOHN G. MURPHY, M. D., Philadelphia. Lindsay & Blakiston, 1851.

This little compendium is one of the best condensations on the subject, with which we are acquainted, and we very cordially recommend it.

THE MEDICAL EXAMINER.

PHILADELPHIA, MARCH, 1851.

RANK OF MEDICAL OFFICERS IN THE NAVY.

Our readers were informed in November last, that a board of of captains was convened to consider the subject of military rank in the navy, in all its various relations. Their report was submitted to Congress on the 21st January, 1851. The board was composed of officers of the line of the navy exclusively; no one of the staff corps was represented directly or indirectly. A surgeon was ordered to appear before it and advocate the claims of medical officers to have assigned them a rank, that is, a definite position in the military organization of which they are members. The same duty was also assigned to a purser. Both the gentlemen were released from the order at their own request. It is understood that, though willing to sit as members, they declined to appear as advocates before a board, the functions of which were limited to expressing an opinion; because as advocates they could have no vote in forming that joint opinion, or of presenting a minority report, should circumstances require it. The board being constituted of gentlemen whose opinions were formed, probably many years before they were called upon to express them officially, it would be no easy task to change their views on the subject in any essential particular. While it is cheerfully conceded that their opinions are sincerely entertained, it is firmly believed they are erroneous to some extent.

To balance or off-set the overbearing influence which the arguments of two staff officers might exert upon the deliberations of the board, two lieutenants of the line were ordered to advocate the claims of the line, or in a word, to satisfy the board that staff officers in the navy should not have any rank. The line advocates performed their duty before the line officers without opposition; and thus the board was left to make up its judgment unembarrassed by any necessity of weighing conflicting testimony and opinions prior to arriving at a conclusion.

Considering the constitution of the board, the presumed class-feeling of opposition to the staff on this point—and it should be distinctly understood the opposition extends no further—and the fixed mental habit of relying upon precedent, the report is quite as liberal as could have been reasonably anticipated.

Substantially the Board recommends first, the creation of new grades of officers in the naval service, namely :—

A grade of line officers, under the title of lieutenant commandant, to occupy a position between the present grades of commander and lieutenant, whose duty would be to command brigs and smaller vessels. The board is of opinion that the addition of such a grade would render the navy more efficient, and seemingly assign, as the only argument for adding another grade of commanding officers to the service, that "it was known during the revolution and prior to the act of March 3, 1801."

It is suggested that the grade of master, heretofore appointed by warrant, shall hereafter be commissioned, because they have "always been associated with commission officers, and their duties require more varied and much higher attainments than are necessary for several other grades of navy officers who now have commissions." The most prominent duties of a master in the navy are to navigate the vessel, and to control the stowage of provisions, &c., in the hold.

It is suggested that the grade of passed-midshipmen should be recognized by law, although the board seems to be unable or unwilling to assign to the grade, duties which are distinct, or in any manner separate from those of midshipmen who have not passed an examination, for promotion to the grades of master and lieutenant.

The board refrained from recommending grades of admirals, being content merely to allude to the subject; because, "motives which must be obvious, when the composition of the board is considered, prevented it from offering any suggestions beyond the limits fixed by the law."

The board recommends that passed assistant surgeons should constitute a distinct grade of medical officers, but does not suggest for it any duties different from those now assigned.

A grade of surgeons, to be denominated "Hospital Surgeons," whose duties would be limited to serving at sea as surgeons of the fleet, and in hospitals on shore is also recommended. The requisite to appointment in this grade is twenty years service in the medical corps or staff of the navy.

It is suggested that a grade of assistant pursers, to be appointed by warrant, should be created.

The second prominent feature of the board's report, is that the "order of subordination may be expressed in the navy by the separate and combined use of the terms *rank*, *precedence*, and *command*, employed technically."

The word *rank* is to be limited, confined exclusively in its application

to officers of the line of the navy—that is, "sea-officers." The proposition of the board is to confine "the use of the term *rank* strictly to those officers who may be eligible to exercise *command*, and only in connexion with, and to the extent of that eligibility; to apply in the same manner the term *precedence* to officers who are not eligible to exercise *any command*, or whose eligibility is limited to their own corps, or when used in comparing the official relations between officers whose relative positions are designated by rank, and those whose positions are regulated by precedence."

The word precedence is thus substituted for the well understood term, assimilated rank; and it is feared the effect of this substitution will be to impose upon all staff officers of the navy the condition of a *caste*, in all things inferior to the line, and be thus made to hold a footing among "sea-officers," similar to that of Jews in a community of strict Roman Catholics; or, at least, similar to that of free citizens of a republic legally deprived of the right of suffrage. If the term precedence be adopted, it is clear, medical officers will have no rank, no military position properly so called.

The word *rank*, applied in military organization, means nothing more nor less than the position of one officer relatively to all other officers. The improper use of the terms *rank* and *grade* synonymously, tends to confound the true meaning of the former. There may be many officers of the same *grade*; all captains are of the same grade, but according to legitimate use of the words, two officers, although of the same grade, cannot be of the *same rank*, that is, possess the same identical official position. Rank determines precedence, and, when on duty, the right of an officer to exercise authority over those below him, as well as his obligation to obey those above him in his grade. Rank in itself confers no authority whatever, but simply renders the officer eligible to exercise the kind and degree of authority described in his commission, either as a superior or inferior of those associated with him on duty.

If the position of a hospital surgeon be designated by the term of precedence, it might be questionable in the minds of casuists in the line of the navy, whether the surgeon had any right to command even a midshipman while in a hospital—to control his going out or coming in—in a word, to exact obedience to his reasonable and legitimate commands as a surgeon by military laws and tribunals. According to the spirit and letter of the proposed law, a staff officer on duty never can be superior to any officer of the line, therefore, the fault of "disrespect to his superior officer" never can be charged by him upon the latter, even under the most flagrant circumstances.

It is doubtful if legislation can make "precedence" a synonym of rank or assimilated rank. It should not be forgotten, in arguments upon subjects like the present, that laws are requisite only for refractory, unreasonable, or weak-minded men: and that none but military laws can apply to members of a military organization.

One more remark on the use of terms: the term "civil officer" is not applicable to any officer subject to punishment by decision of a military court: the use of it in the navy tends to make *caste* distinctions. The term "sea officers," is not an accurate verbal designation of officers of the line, for it is rational to include in the term all officers who serve at sea, without regard to their specific official duties. It is desirable to avoid the use of designations or terms which tend to make caste distinctions in a community of gentlemen equally entitled to consideration. It is supposed by many, whether correctly or not is unimportant, that military men are prone to regard themselves, as a class, superior to simple citizens, or even to those holding civil offices, and for this reason, the term staff being in itself technically correct, should be used in law to designate those who have been heretofore called "civil officers" in the navy. It is desirable that no official designations should be employed, calculated to sustain notions of personal superiority or inferiority, in a community having a general object, the attainment of which depends somewhat on a harmony of parts. Naval efficiency cannot be easily attained without a cheerful co-operation of all members of the service. It is time the conflicting opinions on the subject of rank were settled on some fair compromise.

These preliminary observations will enable our readers to appreciate justly the position proposed for medical officers in the navy. The board divides the staff officers into six classes, and assigns each class a position relatively to some one of the six subordinate grades of officers of the line, as follows:—

Staff Officers. [Miscalled "Civil Officers."]	Line Officers. [Miscalled "Sea Officers."]
First class.	
Hospital Surgeons, [if authorized.]	Shall have precedence with, but after *lieutenants commandant.*
Second class.	
Engineer in Chief, Chaplains, Surgeons.	With *lieutenants*, and with each other, according to the date of their respective commissions.

Staff Officers. [Miscalled "Civil Officers."]	Line Officers. [Miscalled "Sea Officers."]
Third class.	
Chief Engineers, Passed Assistant Surgeons, Professors of Mathematics, Secretaries to Commanders of squadrons.	With, but after *masters*.
Fourth class.	
Assistant Surgeons, Assistant Pursers [if authorized,] First Assistant Engineers.	With, but after *passed midshipmen*.
Fifth class.	
Second Assistant Engineers, Clerks to Commanders of Squadrons, Clerks to Commanding Officers, Clerks to Pursers.	With, but after *midshipmen*.
Sixth class.	
Third Assistant Engineers.	With, but after *boatswains*.

The "precedence" of the several classes and grades of staff officers relatively to each other, is according to the order in which they are named in the above scale; except secretaries and clerks, who shall have precedence "according to the rank of the officers to whom they may be attached or allowed."

Except in the second class, all staff officers are placed in the above arrangement so that they shall ever be the junior, or rather the youngest of the lineal grade with which they are assimilated in rank. An assistant surgeon, for example, after any period of service, even five or six years, must yield precedence to the youngest passed midshipman on the list. Midshipmen are cadets or professional pupils; passed midshipmen are those who, upon examination, have been found eligible for promotion, but are still required to discharge the duties of midshipmen, until vacancies above enable them to advance to the higher grades.

Passed assistant surgeons are made thus the permanent juniors of the grade of master.

Surgeons are assimilated in rank with lieutenants, according to date of commission; and hospital surgeons are made the permanent juniors of the lowest grade of commanding officers of the line, yet to be created. The proposed law requires that a surgeon shall not become hospital surgeon until he has been twenty years commissioned in the medical corps

but there is no *time* qualification proposed for the appointment of lieutenants commanding, and if they reach the grade after being commissioned for five years in the navy, which may be possible under particular circumstances, they have precedence of the oldest hospital surgeon.

But the board has thought that even the nominal position given to medical and other staff officers in this scale might be excessive. It has taken away even the name of rank, and, while dictating a military law to govern them, denominated them "civil officers." Still fearing the aspirations of the latter to equality of social and professional rights and privileges under this scale, might embarrass the line officers, the board has provided for a suspension of the operation of assimilated rank in most cases in which it should be operative. Lineal rank is held to be inviolable both by the executive and legislative departments of the government; but assimilated rank is of such a pliant nature that it must yield to circumstances of caprice or prejudice. The board proposes that the senior officer of the line present, no matter of what grade, shall preside at mess-table and exercise command over all other members of the mess as far as he may deem necessary to preserve order. Under this law a master or junior lieutenant could command any officer of the staff to leave the dinner table, and in event of restiveness, could have him tried before a court-martial under charge of "disobedience of orders." The fourth section of the bill, or suspension clause, provides, "That when sea officers, civil officers, and engineers shall be required to act together on boards, councils, surveys, or other occasions when their joint views or opinions are to be expressed, and in all messes of officers, the *superior sea officer* present shall preside, whatever may be his relative precedence, and may exercise command over the other members, to direct the course of proceedings, and to preserve order; but, when it can be done without serious inconvenience, the senior sea officer ordered on duties where such joint opinions are required, shall be regularly entitled to take precedence of all the civil officers or engineers who may be ordered to act on such duty."

In a word, the board has carefully provided a legal mode of violating the assimilated rank it has suggested, and places staff officers in the navy relatively to the line, in a position comparable to that of a class of people in the free States of the Union, who are denominated free citizens, though forever denied the right of suffrage and eligibility to office among their fellow tax-payers, under any circumstances whatever. According to the proposed law, a midshipman, or even a coxswain, has precedence of and right to command any medical officer, chaplain, purser, &c., embarked in a boat under his momentary orders. A surgeon or purser

attached to a ship, on an official visit to another vessel cannot order a midshipman or coxswain in charge of the boat which brought him to wait; the midshipman may say, I won't remain sir, it is my dinner time. In event of all line officers being killed or disabled, the staff officers, under the proposed law, fall to a level with privates, and might come under the command of a boatswain's mate.

The report, as a whole, labors to establish most of the evils complained of by staff officers. The board has been guided and trammelled by precedents, which, in its appreciation, seem to be stronger than statutes. It is believed that, "Precedents can palliate subsequent errors, but not transmute them into rights, any more than the continuous circulation of a spurious dollar can transmute it into a genuine dollar. Precedents are properly authoritative in courts of law, for they prevent a vacillation in judicial decisions, which, if erroneous, can be corrected by new legislation; but if our national legislature (Congress and President) shall deem itself bound by legislative precedents, no mode exists for correcting errors: 'the salt will, indeed, have lost its savor, and wherewith shall it be salted?' and written constitutions, the American great improvement in government, will lose their quality in rendering principles immutable."

It is presumed members of the profession in the naval service will not willingly accept an assimilated rank in the degrees and terms proposed. It might be just to assemble a board, constituted of staff officers exclusively, to present a scheme of military organization for the navy; such a board would give to the line all the precedence and priority and command necessary to the efficient discharge of duty. The idea of the staff legislating for the line, is not more preposterous than that the line should arrogate to itself exclusively the privilege of legislating for the staff.

It is hoped our readers will take the trouble to make themselves conversant with this question, the final decision of which by the legislature of the Union, must in a manner, settle the standing of the medical profession in the eyes of the nation. It is an interest of every physician, remote though it may be, that the government in all its acts, shall pay due respect to the profession by a just consideration of those members of it employed in the army and navy. To defend them from degradation in the military community, is to defend the standing of the whole profession. Under this view, we recommend that every medical journal throughout the Union take up the subject in defence of a common cause.

MEDICAL CERTIFICATES FOR LIFE INSURANCE OFFICES.

A topic that has for a long time been agitated in the British medical journals, is the adjustment of fees between Life Insurance offices and the medical practitioners who furnish certificates as to the health of persons proposed for insurance. The recent great increase of the business of life insurance in the United States, brings this question home to American practitioners, and calls for some allusion to it at our hands. For the benefit of such of our readers as have not been brought in relation with the subject, it may be well to observe, that, as a preliminary step to effecting an insurance on the life of an individual, the offices require a certificate of his eligibility, and an opinion as to his probable longevity from his medical attendant. This is, however, only an initiatory step, as before accepting any risk, the offices subject the applicant to an examination by their own medical adviser, whose opinion determines their decision in the case. The medical officer attached to the life insurance company, is of course paid by the office. But it has been contended, that the physician of the applicant should also receive compensation from the insurance company for the certificate which he is asked for. And this is the unsettled point—some physicians refusing to answer the schedule of questions proposed with reference to their patients, unless accompanied with a fee.

This is rather a question of a business than a professional character, and much may be urged upon both sides of the matter in dispute. It appears to us, however, (and this seems to be the opinion of such of our cotemporaries as have noticed the controversy,) that the weight of propriety inclines to holding the applicant for life insurance responsible for the remuneration of his own medical attendant. In all proposals for life insurance the basis of the contract between the party proposing and the office, is an unreserved communication of every fact in any way bearing upon the party's past and present condition of health. Naturally, the medical attendant of the applicant is looked to as the best means of supplying the required information, and it is on behalf of and as the organ of his patient, that he furnishes it; his opinion of the value of the life proposed for insurance not deciding the company in its final acceptance or rejection.

It has also been urged in some of the British journals, that if fees were indiscriminately paid by the offices, on presenting the schedule of questions to the applicant's medical referee, collusive applications might be tendered on lives, of the ineligibility of which no doubt could exist. This argument is, of course, inapplicable to the great body of the profession. But when we bear in mind the number of irregular practitioners,

whose certificates may be received on these occasions, we cannot condemn the insurance companies for desiring to protect themselves against possible fraud.

MEDICAL NEWS.

CASE OF FISTULA OF THE STOMACH.—Another case of communication between the stomach and external surface of the abdomen, very similar to that of Alexis St. Martin, the well known subject of Dr. Beaumont's interesting observations, is reported by Dr. Robertson, of the Edinburgh Royal Infirmary, in the Edinburgh Monthly Journal of Medical Science, for January, 1851. The perforation had resulted from internal causes, and the present condition of the patient, a woman, thirty-six years of age, encourages the hope of some valuable results from experiments on the digestive process. Drs. Christison, Syme, and others, have been appointed, on behalf of the Edinburgh Medico-Chirurgical Society, to assist Dr. Robertson in his investigations.

We learn that Prof. HORNER, of the University of Pa., has, in a recent dissection, distinctly seen the *Pleuro-Œsophageal* and *Broncho-Œsophageal Muscles*, as described by Prof. Hyrtl, of Vienna.

DEATHS OF DISTINGUISHED PHYSICIANS.—France has recently lost one of her most eminent physicians in the person of M. FOUQUIER, physician to La Charité.

Dr. John HAVILAND, Regius Professor of Medicine in the University of Cambridge, England, died on the eighth of January last.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION.—At a Meeting of the College of Physicians, of Philadelphia, held 4th February, 1851, the following gentlemen were elected delegates to the Meeting of the Association, to be held at Charleston, in May next. Drs. G. B. Wood, G. Emerson, G. W. Norris, W. S. W. Ruschenberger, J. R. Paul, F. G. Smith, D. F. Condie, I. Hays, W. B. Page, W. Pepper, J. Carson, J. Neill, and Caspar Morris.

The Delegates from the County Medical Society have not yet been chosen.

DR. JOHN CURWEN has been elected Superintendant of the State Lunatic Asylum of Pennsylvania.

The Catalogue of the University of Pa. announces 466 Students for the current session. That of the Jefferson Medical College, 504.

The population of Virginia, according to the recent census, numbers 1,428,000, of which 1755 are Physicians—giving a ratio of one Physician to every 813 inhabitants.

Professor of Chemistry in Harvard University.—We learn that Mr. S. P. Cook, the Professor of Mineralogy, &c., in Harvard University, has been appointed Professor of Chemistry in place of Professor Horsford, and will enter upon his duties next fall. In the mean time he will make a tour through Europe for scientific improvement.

Adulterated Drugs in New York.—It is stated in the Newark Daily Advertiser, that Dr. M. J. Bailey, the first Examiner of Drugs for the port of New York, during nine months prior to his removal from office, rejected 90,000 pounds of various base drugs. For some reason, unknown to us, Dr. B. has been displaced. It is stated in the paper above alluded to, also in one or more of the New York papers, that efforts have been made for the restoration of Dr. B., on the ground of his superior qualifications, and the increased importation of adulterated drugs since his displacement.—*Bost. Med. and Surg. Journ.*

Assistant Surgeons United States Navy.—The following Assistant Surgeons in the Navy, examined by the Medical Board convened at the Naval Asylum, Philadelphia, have been found qualified for promotion, and passed, viz :—

Robert T. Macoun, Passed Assistant Surgeon, to rank next after Passed Asistant Surgeon Richard McSherry.

William A. Harris, Passed Assistant Surgeon, to rank next after Passed Assistant Surgeon Robert E. Wall.

Passed Assistant Surgeon Henry O. Mayo, to rank next after Passed Assistant Surgeon Wm. A. Harris.

Of the candidates examined for admission into the service as Assistant Surgeons, the following have been found qualified, viz :—

No. 1. Samuel F. Cowes, Portsmouth, N. H.
No. 2. Jacob S. Dungan, Philadelphia.
No. 3. George Peck, New York.
No. 4. Charles F. Fahs, York, Pennsylvania.
No. 5. Jenks H. Otis, Boston.
No. 6. Frederick Horner, Jr., Warrenton, Va.
No. 7. James B. Whiting, Norfolk, Va.
No. 8. Randolph Harrison, Cartersville, Va.
No. 9. W. E. Wysham, Baltimore, Md.
No. 10. Albert Schriver, Philadelphia, Pa.
No. 11. Thomas Le Page Cronmiller, Savage Factory, Md.
No. 12. E. Drayton, Philadelphia, Pa.
No. 13. Wm. L. Nichol, Nashville, Tenn.
No. 14. John C. Coleman, Halifax Courthouse, Va.
No. 15. J. Page Hopkins, Winchester, Va.
No. 16. Richard H. Cowman, Annapolis, M.

RECORD OF MEDICAL SCIENCE.

PATHOLOGY AND PRACTICE OF MEDICINE.

The Alum Treatment of Lead Colic.—M. Brachet, of Lyons, in a recent elaborate prize essay on Lead Colic, presented to the Toulouse Academy of Science, offers very strong testimony, in confirmation of the value of the alum treatment in this disease. Having been medical adviser for above thirty years, to the tinman's trade-union, which of course furnishes a great number of cases of lead-colic, and also physician to a large hospital, he has had under his notice more than 300 cases of the affection. After employing the purgative, opiate, and antiphlogistic systems of treatment, with varied success, M. Brachet finally had recourse to *alum*, as recommended by Gendrin, and was able in 1838, to report highly in its favor, and since that period he has continually employed it, without accident or disappointment occurring. He prescribes from 1½ to 2 drachms in a ptisan, to be taken during the day, adding to this 40 or 50 drops of laudanum, and if the bowels do not act by the third day, giving a mild aperient: and the case is complete. More than 150 patients have been thus treated with entire success, the alum being continued a day or two after the symptoms have disappeared.—*Abridged from British and Foreign Review, January,* 1851.

Cases of the Termination of Acute Rheumatism in Suppuration. By MM. Fleury, Andral, and Trousseau.—In a late discussion at the French Académie de Médicine on the subject of acute rheumatism, some of the speakers laid considerable stress upon the rarity of the termination of rheumatism in suppuration, and this has led to the publication in the medical journals of some examples of it. Professor Fleury, of Clermont, states that, up to 1848, he had always believed with M. Chomel, that rheumatism never so terminated; for, practising in a part of the country wherein the disease is of frequent occurrence, he had never met with a case of such before, although he had frequently had cases transferred to his surgical wards from the physicians' under the idea that such was the case. The present case occurred in a youth, æt. 18, of sound constitution, and hitherto of good health. He was admitted into the Hôtel-Dieu, at Clermont, 2d October, on account of acute rheumatism of the shoulder and knee, induced by sleeping in a damp chamber. Suppuration was set up, notwithstanding active antiphlogistic treatment, in both joints, the abscesses being left to discharge themselves; and he died on the 12th of November, of purulent infection. On examination, the articular surfaces were found denuded, a metastatic abscess existed in the right lung, but no other disease of any of the viscera was found.

M. Andral read the next case to the Academy. A woman, æt. 67, of feeble constitution, was admitted into La Charité early in July last, suf-

fering from pneumonia, from which she rapidly recovered by bleeding and tartar emetic, and was in a state of convalescence, when, from the effect of a current of air, she became attacked with acute rheumatism of the shoulders, unattended with complication, the attendant fever being great. She was bled, which so enfeebled her as to forbid the repetition; and next day twelve grains of quinine in the twenty-four hours were prescribed. The disease proceeded on to a fatal termination with fearful rapidity, without any complication occurring, any anormal sound of the heart, or any other joint participating. She died on the eighth or ninth day, having exhibited no other symptom than intense pain in both shoulders, a pulse of constantly increasing frequency, and a state of general anguish and rapid sinking, resembling that observed in acute peritonitis. The most careful examination of every organ failed to elicit any explanation of the issue; nor were there any signs of phlebitis or purulent infection. Both shoulder-joints, however, were found filled with white, homogeneous pus, and the synovial membrane was of the intensest red, the articular cartilage retaining its normal colour. Some of the bursæ in communication with the joints were also filled with pus; but external to the joints all was normal; bones, periosteum, and muscles having undergone no change whatever.

M. Trousseau relates a case also, which occurred in a child æt. 9, who, having always enjoyed good health, and been unexposed to privations, was attacked with intense scarlatina, and, during its prevalence, various of the joints became the seat of acute rheumatism. She died on the fifth day of the scarlatina, and third of the rheumatism. On examination, the various organs were found in a healthy condition, with the exception of the pleura, which contained a considerable quantity of serosity. Both shoulder-joints, and those of the elbows, knees, and ankles, were filled with a considerable quantity of greenish, well-formed pus, accompanied by considerable vascularity of the subsynovial cellular tissue.

M. Trousseau observes, that the practitioners who have much observed disease in children, must be aware what a powerful effect the exanthemata exert in engendering a *purulent diathesis*. If this child had contracted the rheumatism unconnectedly with the scarlatina, it would have probably determined the synovial effusion usually found; but the scarlatina having changed the *crasis* of the blood, developed the suppurative diathesis, and converted a trifling affection into one of an irremediable character. Was not the old woman, whose case is related by M. Andral, reduced, M. Trousseau inquires, by the debilitating treatment to which she was subjected, to a condition analogous to that into which scarlatina so often places children?—*British and Foreign Review, January* 1851, *from Bulletin de l'Académie,* xv. pp. 774–785; *Gazette Médicale,* Nos. 26 and 32; *L'Union Médicale,* No. 102.

Acute Articular Rheumatism treated with Lemon-Juice.—Dr. Rees, of Guy's Hospital, has employed lemon-juice, in doses of an ounce every fourth hour, in acute articular rheumatism. The administration of this remedy in gout and articular rheumatism suggested itself to Dr. Rees' mind from the fact that the elements of lithic acid may be easily convert-

ed into those of urea and carbonic acid by the use of water and oxygen, and he was inclined to trust to the remedy more especially in reference to the necessity for a supply of oxygen. He considered, moreover, that "probably the small proportion of alkaline citrate present in the lemon-juice, which by decomposition during the digestion yields an alkaline carbonate to the blood, might assist in the cure." Dr. Rees advances this *theory* with certain reservations, but he firmly believes that the remedy "assists in obtaining earlier relief than has heretofore been the case in a most distressing malady." "The form of rheumatic disease, in which the greatest benefit seems to have been derived from the lemon-juice, is that of acute rheumatism, and that form of rheumatic affection involving the smaller as well as the larger joints in acute inflammation, and known as rheumatic gout."—*Abridged from Dublin Medical Press*, Nov. 27th, 1850.

Expulsion of the Tape-worm by the Oil of the Male Fern.—Dr. Budd, of King's College Hospital, London, has been lately making some interesting experiments with an old anthelmintic, the oil of the male fern, in expelling the tape-worm, and reports a very gratifying success. Mr. Pollard, M. R. C. S., of Halifax, has also used the oil of the filix mas, with marked success.—*Abridged from London Lancet, 7th and 21st Dec.*, 1850.

SURGERY.

Case of Dislocation of the Scaphoid Bone of the Foot. By Dr. Walker, Peterborough.—Dislocation of the scaphoid or navicular bone of the tarsus is an accident of very rare occurrence; the position and the connexions of this bone render its displacement so improbable, that it is generally regarded as impossible that it should occur, "unless," as Mr. B. Cooper remarks in his "Treatise on the Ligaments," "it be attended with total destruction of the foot." To the extensive observation of Sir A. Cooper no such case had ever presented itself; the following therefore must be regarded as one of peculiar interest:—

On the 10th of June, 1850, a stone-mason, aged 40, and of a spare but sinewy form, in stepping from the top of a wall, eighteen feet high, to another about a foot lower, over an intervening space of about two feet, advanced his right foot, but stepped short, his toes only resting upon the wall, his whole weight being, in the act of stepping, thrown upon the right leg. The foot, as he says, "bent upwards, and something gave way." Falling down between the two walls, he found himself on the ground on his hands and knees, not hurt, as he conceived, by the fall, but quite unable to work, and his foot in great pain. He was carried home, and I saw him next day. He was in bed, and on examination my opinion of the case entirely coincided with that of Mr. Hanbury, our excellent house-surgeon, who had previously visited him. We found a bold projection on the dorsum pedis, in the situation of the os naviculare, and a corresponding depression beneath, where, in the nor-

mal condition, the tuberosity of this bone forms a distinct projection. Over the displaced bone the skin was tense and red, and over this point there was a good deal of pain on pressure. He could bend and extend the ankle-joint without difficulty or much increase of pain. I at first tried to reduce the bone by firm pressure with the thumbs, but it felt firmly fixed in its abnormal position, and I could not move it.

I then requested Mr. Hanbury to press the foot downwards, whilst I attempted to return the bone to its position between the astragalus and cuneiform bones, and with an audible snap it returned, and the deformity disappeared.

I then merely directed the foot to be kept quiet and fomented; but two days after, finding that the bone felt loose and easily moveable, with a tendency to slip upwards, occasioning the peculiar appearance of a slight dimple or hollow in place of its natural projection, a plaster and roller were applied.

He was confined to the house for three weeks. He then returned to his work, but continued slightly lame for about a month after. This morning (Sept. 16th) I find, on examination, no remaining appearance of injury; he has no pain, and the motions of the foot are perfect.

The practical conclusions to be drawn from this case are, that although rare, this dislocation is not impossible; that when it does occur it is not difficult of detection, neither is there any peculiar difficulty in its reduction; also, that in the absence of any complication from more extensive injury to the structure of the tarsus, than *in this case must have existed*, we may venture to anticipate complete recovery, notwithstanding the injury to, and probable laceration of, the astragalo-scaphoid and calcaneo-scaphoid ligaments, as well as of the tendon of the tibialis posticus muscle, which are the necessary conditions of such a complete dislocation of the scaphoid bone as I have here described.—*Prov. Med. & Surg. Journal.*

Case of Luxation of the Penis.—This curious case occurred in a lad æt. six, who fell from a cart. He was treated for the resulting contusions for some days, when it was observed that urine passed through a wound near the left buttock, and he was sent to the St. Louis. M. Nelaton on taking hold of the penis to pass a catheter, was astonished to find it quite destitute of substance, giving him the same sensation as the skin of a silkworm after the insect had quitted it,—a mere cutaneous tube bent upon itself. Feeling for the missing penis, he found a firm resistant body in the scrotum, which he recognised as the corpus cavernosum and glans, all the essential parts of the organ having thus remained in the scrotum for nine days. He introduced Sir A. Cooper's instrument for tying deeply seated arteries, through the cutaneous tube, and conducting the tube under the *corpus cavernosum*, seized this crosswise, and by a to-and-fro movement succeeded in replacing the organ. An incision was made *in perineo* to facilitate the evacuation of the urinary deposit which had occurred from the rupture of the urethra; and at the time of the report the child had not yet passed any urine by the natural channel.

As arising in a somewhat similar manner with this accident, viz.,

through the agency of a sudden compression, a case may be mentioned that was admitted sometime since into the Hôtel Dieu, in which one of the testes was found along the *corpus cavernosum* just under the skin as far as the glans. It was very easily reduced, and at the autopsy it was found that it had not become separated from the cord.—*British and Foreign Review, Jan.* 1851, *from Gaz. des Hôp.*, No. 86.

Repeated Injections of Iodine in the Treatment of Encysted Tumors—M. Borrelli of Turin, makes a small oblique opening into the cyst, by which he evacuates its contents. He then injects, by means of a syringe, an alcoholic solution of iodine, which he leaves in the cyst, closing the aperture with diachylon or charpie. Pain ensues in the course of two or three minutes, and continues for about twenty-four hours. The inflammation which is excited may usually be allayed by a poultice. The tumor which before was tense and painful becomes softened and diminished in size, while a colored fluid oozes from the incision. Sometimes, after the first injection, and as soon as the local inflammation has subsided, the cyst becomes detached, and may be extracted with the forceps; but usually it is necessary to repeat the injections two or three times before obtaining a complete separation. When the cyst is withdrawn, the radical cure is easily completed.—*Lond. Med. Gaz. Dec. 20th*, 1850.

Collodion applied to burns.—Dr. Liman, of Berlin, states that he has found collodion a most excellent application to burns. He has applied it in many cases with the best results. He states that it allays the smarting, forms a protective covering, which excludes the action of the air, and is so exactly adapted to all parts that no other dressing is required. The first application is attended with some pain, but is soon followed by alleviation of the suffering, and the cure proceeds steadily without pain. Dr. Liman applied the collodion with a hair-pencil, covering the entire surface, and daily reapplying it to the fissures and uncovered parts. Dr. Liman relates one case in which it was applied in an extensive burn withi mmediate advantage, and produced a speedy cure, without there remaining contractions of the integuments.—*Ibid. from Casper's Wochenschrift.*

Extirpation of Goitre.—The French Académie de Médicine, has lately been occupied with an interesting discussion on the *extirpation of goitre.* The debate originated in a case narrated by M. Roux, of a young man who was the subject of a tumor over the thyroid cartilage the size of a fist. The tumor was very hard and lobulated, and painless, and although it adhered closely to the larynx, it did not materially intefere with respiration. The patient wished to get rid of his tumor at all risks, and M. Roux therefore operated in the following manner:—

He first made a long vertical incision from the os hyoides to the base of the sternum; this disclosed the tumor, which was readily dissected away, and but little blood was lost from the promptitude with which the

vessels were ligatured. When, however, the recurrent nerve was divided, he had a paroxysm of dyspnœa, and the voice became extinct, and has since remained feeble. The operation, which lasted half an hour, was not followed by any bad symptoms.

The tumor extirpated, was irregularly ovoid, and enveloped in a cellulo-fibrous sheath. It was composed of numerous cysts of various sizes, some containiug a transparent serosity, others a cretaceous matter.

Another case was related by M. Hutin, senior-surgeon to the Invalids, and a third was communicated by M. Velpeau, in the name of Dr. Cabaret. Both were successful.

The discussion which originated in the detail of these cases showed distinctly that the dangers of the operation were considered very great. Velpeau, Roux, Begin, all expressed their opinion that the operation ought never to be undertaken, without admonishing the patient of the risk incurred.—*Prov. Med. and Surg. Journal, Dec.* 11*th* 1850.

OBSTETRICS.

On Lactation. By M. Trousseau.—Exhausted as this subject might seem to have become, M. Trousseau nevertheless makes several interesting observations upon it. An infinitely larger number of infants are brought up by wet-nursing in France, especially in the large towns, than with us; for not only are the mothers more occupied in business or amusement, but their medical advisers are accustomed to place more restrictions upon their acting as nurses to their own children, than we think desirable. The mother should be allowed to follow her natural inclination to nurse, M. Trousseau says, when she is strong, has a good constitution, is unaffected with hereditary disease, and her breasts are of a good configuration, provided she is not so placed that she is able to take little or no exercise, or cannot resign the dissipated habits of gay society.

In deciding beforehand whether a woman is likely to prove a good nurse, the *large size of the breasts* has been erroneously considered a sign of the affirmative. The mammary gland, separated from the adipose matter surrounding it, is always very much of the same size, and does not secrete milk in proportion to the size of the breast. A far better sign is drawn from the veins of the organ being very distinct and its vascularity well marked. Another, is the fact of the woman having been accustomed to perceive a vigorous flux towards the mammæ just before each menstrual epoch, the breasts then becoming hardened and the lobules of the gland as it were more prominent. When this physiological sign is distinctly present, it is the most important and most certain of all, although not indicated by preceding writers.

When a young woman becomes pregnant, her *nipples* swell and increase in length to about 4 lines, the surrounding papillæ become prominent, and the areola dark. Such a person will have a good nipple for suckling; but in a great number of women the nipple is only on a level with the breast, and, in such, means should be taken to bring it out during the latter months. The best means of effecting this is to wear a

nipple-shield under the corset. If this is worn for the two or three last months, the nipple is found to have acquired the necessary projection by reason of the compression that has been exerted at its base alone.

As to the period when the child ought to be applied to the breast, M. Trousseau directs this to be a few hours after delivery, when it will very shortly procure milk, although what is called "the draught" may not take place for two or three days. If suckling be delayed till then, the breast becomes painful, the nipple buried and ill-erected, the lacteal vessels obstructed with colostrum, and suction is both difficult and painful; while engorgement and abscess of the breasts, or fissures of the nipple, may compel an abandonment of suckling altogether. [There can be no doubt of the importance of early suckling here urged by M. Trousseau, especially with the first child; but in women who suffer severely from after-pains, these are dreadfully increased during suckling, so as often to necessitate its postponement.] With respect to the child, M. Trousseau advises an ingenious procedure which we are inclined to think might have saved trouble in some cases we have seen. It is the giving it to suck, before applying it to the breast, a very short hard piece of linen, tied up in the shape of a nipple, and moistened with a little sugar and water. The infant likes the taste, but the body being hard and short, it finds, after its efforts upon it, that the suction of the mother's nipple is a much more pleasant operation. It has already tried its strength against a greater resistance, and without having done so it will often not take the nipple kindly, The fluid employed must not be too sweet, or the mother's milk will appear tasteless afterwards.

As to *regulation of the suckling*, this must not be attempted at first. Children in hospitals lose weight during the first nine days, andin private life during the first two days, and at first they should be allowed to suck as much as they will, which is also of use to the mother, who has then abundance. This may go on during the fortnight or month that she is within doors, and can sleep or rest as she likes; but when she resumes her occupations, suckling should be regulated, and above all things so as to allow rest at night. To this end, during the first two or three months, the child should be suckled at short intervals during the day, but only once between 8 and 9 at night and 7 next morning. After three or four months, most women require a little assistance; and a meal of milk mixed with any suitable fluid should be given the child by the sucking bottle at the beginning or middle of the night, by which means the mother's repose and the reaccumulation of her milk are aided. During the day artificial food must at first be chiefly formed of milk or farinaceous matters, by far the best of these being, in spite of Rousseau's denunciations, *pap*, made with the crumbs of well-baked, light stale bread. It is of importance that the food should not always be the same but composed of different farinaceous articles, &c., at different meals, and care being taken to observe which is digested best. As the time for weaning approaches, the food must be more varied, eggs differently prepared, chicken and other broths, and especially beef-tea should be employed, still however, encouraging the infant's taste for milk.

In respect to the *nurse*, of course she should observe all the rules dictated by a sound hygiene, if she wishes to preserve her milk good. The most absurd prejudices prevail in respect to nourishment; and thus it often happens, that a nurse arriving from the country, who had enjoyed excellent health on a vegetable diet, becomes ill and loses her milk through the highly animalized food she is overloaded with. If a nurse menstruates, 99 out of 100 mothers would change her, although the milk is as good, but in a smaller quantity just at the epoch. Most women after 11 or 12 months menstruate without their milk deteriorating. The case may be different if menorrhagia or leucorrhœa is present. M. Trousseau also considers that the milk, though lessened in quantity, is not deteriorated by the occurrence of a new pregnancy. About the sixth month, however, becoming mingled with colostrum, it purges the child a little, and then weaning should be resorted to. He has very frequently seen a nurse able to suckle quite well until her confinement, although he certainly would not choose one if he knew she was pregnant.

In towns *bringing up children by hand* is a most difficult matter, and never to be advised. In the provinces, where abundance of good milk can be got, it is far easier, and in Normandy almost all the children are so brought up. Even there, however, a great number perish. Among all the varieties of sucking bottles, the best is a phial, corked by a piece of sponge, and tied over by a piece of old linen, the fluid always being given at the temperature of the body. It is necessary that the child should make some effort in sucking, or saliva is not educed. Instead of the linen, a piece of chamois leather answers well, if kept constantly well washed.

Weaning should be delayed as long as possible, provided neither nurse or child suffer, and in the case of weakly children even for two or three years. This is the epoch of their dentition and various maladies, and it is very convenient to have so digestible an aliment at one's command. It is to be observed, too, that the longer they continue to suck, the less do they entirely depend on the breast. Age should not guide us in determining upon weaning, so much as the evolution of the teeth. This evolution takes place in *groups*. In the first group, the two lower median incisors appear, in the second the four upper incisors, in the third the four first molars and two lower lateral incisors, in the fourth the four canines, and in the fifth the four last molars. During the evolution of these respective groups, weaning should never be attempted; while, after this is completed, an interval of repose favorable to the attempt occurs. It is not until the canines have appeared that we should advise weaning, if avoidable, these being the teeth attended with the most difficulty in their evolution. The child before weaning should have been gradually accustomed to other articles of diet; and in those cases in which it seems to have an aversion to milk, every variety of food must be tried till the suitable one is found. There is, in fact, no rigorous rule upon this subject; but that should be given which is best digested.—*Brit. and For. Rev. from Gazette des Hôpitaux*, Nos. 23 and 24.

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ORIGINAL COMMUNICATIONS.

Lectures on Scarlet Fever. By Caspar Morris, M. D., late Lecturer on Practical Medicine in the Philadelphia Medical Institute.

Lecture III.

As yet every step taken in the process of investigation into the nature and habits of the cause of this disease, leads further from certainty as to its character and the laws by which it is governed. Though prevailing most frequently during the changeable weather either in the spring or autumn, and extending itself through the winter, in this respect manifesting its affinity to other febrile eruptive diseases with which it is sometimes associated, measles, erysipelas, and varicella, it is much more common to meet with isolated cases of it than of them which can not be traced to any infection, and which fail to propagate the disease in others who are brought most closely in connexion with it.

I have seen quite recently, during the intense heat of July, one well marked and fatal case, in a large family of children, without spreading to any other members, though no attempts at

isolation were made. Similar cases are familiar to every physician. The access to the chamber was as free, and the visits of the other children were as frequent, as the warmest affection could dictate. The subject was the youngest child, and an only daughter, and therefore the least exposed to external influences; it were vain to attempt any solution of the question from whence the miasm was derived which gave rise to this case. Such are of frequent occurrencé, and if received without any investigation of the circumstances which modify them, and without any regard to others of an opposite tendency, would shake the faith of the most devoted believer in the contagious character of the disease. There is, however, some peculiar want of susceptibility to the impression of morbid poisons in this family, as they had escaped with equal impunity, a few months previously, when varioloid was brought into the house by a relative, taken into it, without the adoption of any precautionary measures, from a boarding house where he had sickened with that disease.

Some eminent teachers of medical science are disposed to solve the difficulty growing out of the frequent observation of such cases, in a very summary manner. Whilst they admit them to be characterized by all the symptoms of scarlet fever, so that we cannot in any way distinguish them from that disease, they think the mere absence of the power of propagation, and the inability to trace them to any connexion with a previous case or epidemic influence, sufficient reason to consider them an entirely distinct disease. Such is the opinion of Professor Mitchell, and such appears to be that of Dr. Chapman, who, in his lectures on exanthematous fevers, says, "Moreover I have repeatedly met with in the winter, and uniformly, I think, when snow is on the ground, an affection bearing a still closer resemblance to scarlatina. Children acquire it, mostly, or perhaps exclusively, by becoming heated from playing in the snow, and then suddenly chilled. The collapse is often very considerable, followed by febrile reaction, much cerebral disturbance, delirium, stupor, and sometimes convulsions, sore throat, nausea and vomitings, and by an eruption so scarlatinous in its aspect, that it may readily be mistaken for that disease. Nor is it scarcely less fatal. Death, I have known to take place from it in a few hours, from an inability to arouse the system out of its torpor, or by convul-

sions." You are well aware of the high estimate I place on the quickness of perception, clear judgment, and perfect accuracy of of Professor Chapman, and long observation has given me entire confidence in the correctness of his diagnosis; yet even the weight of his authority cannot lead me to doubt the dependence of the cases he thus describes upon the miasm which produces scarlet fever. While we know, on the one hand, that the causes of other diseases may lie long dormant in the system, only waiting for exciting circumstances to develope their activity, and, on the other, that even the most contagious diseases occur occasionally as sporadic cases, it appears to be more in accordance with analogy to consider such cases as scarlet fever, failing to diffuse itself, from some unknown cause, than to erect a new form of disease distinguished from scarlet fever by no symptom, but this one negative characteristic.

In the month of December, 1832, the disease appeared among the inmates of the House of Refuge for juvenile offenders. It was prevailing in the city at that period, as will be proven by reference to the table furnished by Dr. Emerson which exhibits the mortality of that year as the highest in the ten years from 1830 to 1840. The discipline of this institution is such as secludes the children almost entirely from communication with persons beyond its walls. This might be supposed to afford an unusually valuable field for observation on its introduction and mode of diffusion. The difficulty we encounter, however, in determining the manner in which it was introduced into the institution, is one which exhibits the obscurity in which the question is enveloped. I was at the time the attending Physician, and made a daily record of every case of sickness requiring my care, in a book kept in the institution for that purpose. A few cases of sore throat had been noted; one of erysipelas, and several of varicella, all on the boys' side of the institution, within the fortnight which preceded the breaking out of scarlet fever.

The first well marked case, however, occurred in the person of a visitor to the family of the matron, thus throwing a strong shade of uncertainty on the question of origin. The second was that of a sister of the first; and the first cases among the permament inmates occurred at the time of the convalescence

of the first patients, in the matron's family. Had no cases of sore throat among the children preceded the first well developed case, the presumption that the disease had been introduced by her from without, would have been strong, especially as the apartments occupied by the matron's family, were in that part of the premises appropriated to the females, and it was among the females the disease first diffused itself. The buildings are extensive, surround a very large enclosure, and are so arranged as to effect a separation of the sexes at *all times*. The disease spread rapidly among the girls, five cases occurring simultaneously on the 25th of December; and one boy on the 29th of the same month; two other boys were taken on the 11th of January 1833. On the 19th a case of varicella was presented among the boys, followed by several others within the following week. Scarlet fever and sore throat without eruption, continued to prevail among both boys and girls till the end of March, amounting in all to sixty cases, without one fatal termination. If no case of sore throat with fever among the children had preceded the sickness of the visitor, this history would have been very decidedly favorable to the idea of the dependence of the disease on contagion; and this would have been strengthened by the manner in which it spread to her immediate attendants, and the inmates of the apartment in direct communication with her sick room. The interval also between the first case and those which followed, was such as is most conformable to the idea of its contagious character; and this is confirmed by the number then seized simultaneously. But any positive decision as to the mode of introduction, is forbidden by the previous prevalence of sore throat, with fever, among the children. MM. Rilliet and Barthez, in recording their observation of the disease, in the wards of the Hospitals for sick children in Paris, appear, on the contrary, to be able to trace every period of its prevalence in that institution, that came under their notice, to the introduction of a patient suffering with it, from whom it spread to the children who had been brought in with other diseases.

Among the circumstances which favor the idea of some influence which is propagated in the person of the sick, and thus diffused from one individual to another, no slight degree of importance is due to the fact that it is said to be unknown in those distant colonies settled by Europeans, the voyage to which is so long

that the influence of the specific poison is exhausted before the arrival of the vessel in which it might be transported to their shores. Thus it is said to be unknown in the thickly peopled and civilized colonies of Australia and Van Dieman's Land; and Dr. Gregory asserts that there is no record of its prevalence in the Indian possessions of Great Britain. If direct contagion, or the transportation of some "materies morbi," eliminated in the progress of a case, be necessary to act as a ferment in diffusing the disease, and its epidemic prevalence has never an independent origin, places thus far removed from the old centres of civilization may forever remain exempt; unless we adopt the extreme view of Dr. Elliotson, as quoted by Dr. Chapman, who believes the infecting cause may be retained in the apartments where the disease has once existed, a much longer period than that occupied by these voyages. He asserts that "all the children admitted into a particular ward under his care, in one of the London Hospitals, were seized with scarlet fever for two years, in consequence of a patient with the disease having been in the ward at that remote period, and this, in despite of white-washings and other cleansings." The want of any regular medical reports from those countries, leaves a doubt as to the accuracy of the statement, that scarlet fever is unknown there. The point is one well worthy of investigation, and our own new settlements on the Pacific, will afford an excellent field for careful observation.

Reasoning upon the probabilities of the case, we should be disposed to the conclusion that it would be found to exist in all parts of the world. The constituents of the atmosphere, the physical arrangements of the material creation, the nature of man himself, his tendencies and susceptibilities, have ever been the same; it would be therefore but a natural presumption, that the diseases to which he is subject should undergo no greater modification than results from the varying habits which mark different stages of refinement or circumstances of wretchedness.

True it is, that diseases supposed to be new, have from time to time made their appearance, and diffused themselves in a manner as mysterious as scarlet fever. Black death, sweating sickness, cold plague, cholera, have each in successive ages, performed their ministry, by thinning out the teeming population of the

earth, and then disappeared from observation. But the imperfect records of these visitations, which have been transmitted to us leave room for the doubt whether they have not been mere modifications of the same disease, or the revival of plagues, the records of which have escaped from the grasp of history. The great diversity in character, presented by different epidemics of of scarlet fever, when taken in connexion with the known dependence of these several forms of the disease on one common cause, appears to favor such an assumption. Were it not so entirely established by testimony beyond contradiction, who could believe that forms of disease so apparently dissimilar as those assumed by scarlet fever in its different epidemic visitations, depend on a common cause? So frequently does this disease disappear from observation in a given district, (and occasionally, as we have seen, even from large cities,) so varying are the phases in which it presents itself, and so uncertain are the traces of the mode by which it has been introduced, that until further light is thrown upon it, we must be content to believe that it does at times commence anew from the operation of unknown influences.

Far from us be the worse than pagan infidelity, which would overlook the interference of Divine Providence, in the ordering of times of sickness or of health. If heathen moralists and heathen poets could recognize the interposition of the Gods, or seek to appease the rage of an incensed Apollo, it were surely shame for those who live in the light of Revelation, to rest on second causes only. It is, however, a duty incumbent on us as members of that profession to which the community entrusts the interests of health and life, to investigate narrowly, all second causes and collateral circumstances, which may furnish occasion for the origin, or facilitate the diffusion of this, as of every other of the many diseases, which are employed as "scourges of humanity." False indeed, were that faith, alike unsound in its foundation and disastrous in its application to man's necessities, which would teach us to lay aside our reason and cease to exert our powers for self protection. If variola may not be exterminated, nor cholera driven from the pale of civilization, vaccination mitigates the horrors of the one, and cleanliness and free ventilation, abate the intensity of the other. So if scarlet fever depend for its diffusion upon direct contagion alone, we may curtail its extent by proper pre-

cautions, which are, however, onerous and inhuman, if it have no such power of propagation. I would therefore, urge upon you, to begin from the very commencement of your professional career, a series of careful records of every fact which can throw light upon this question, not only with reference to the disease now under consideration, but all others of a kindred character. It is as much the duty of the physician to foresee the coming evil, and recommend precautionary measures, as to cope with disease in its individual manifestations in the chamber of sickness. The remarks of Dr. Rush on this subject are scarcely too strong, when in speaking of yellow fever, he says, "to all natural evil, the Author of nature has kindly prepared an antidote. Pestilential fevers furnish no exception to this remark. The means of preventing them, are as much under the power of human reason and industry, as the means of preventing the evils of lightning and common fire."

To trace down from remote ages, the mere record of the early history of the disease would be an unprofitable consumption of our time, too limited already for the investigation of matters of greater importance to you. It is not uninstructive, however, to know that this same uncertainty, as to its origin and mode of extension, has marked its character in every age; and hence, before the free diffusion of knowledge, through the agency of the press, put the members of the profession in possession of more extended information as to what was passing, or had occurred beyond the sphere of their own observation, it was *frequently* reported as a *new disease.* The earliest trace of its existence which has fallen under my own notice, dates in the first century of the Christian era, and is found in one of the tragedies of Seneca, where a chorus describes the devastation of Thebes by the plague, with which that city was visited on account of the involuntary incest of Œdipus, in the following terms:—

O dira novi facies leti!
Gravior leto! Piger ignavos
Alligat artus, languor, et ægro
Rubor in vultu, maculæque caput
Sparsere leves: tum vapor ipsam
Corporis arcem flammeus urit
Multoque genas sanguine tendit.

Oculique rigent, et sacer ignis
Pascitur artus. Resonant aures,
Stillatque niger naris aducæ
Cruor: et venas rumpit hiantes.

To those of you who have retained your familiarity with classic literature, it were an ungracious act to attempt to point out the admirable adaptation of this description, to the malignant form of the disease now under consideration. No poet or philosopher of the present day could furnish a more accurate delineation in the same number of words, unless himself familiarised with the disease by personal observation. Every lineament traced by the poet, is admirably correct. The adjuration of the *new* form of mortality more dreadful than death itself; commencing with languor of the limbs, while redness appears upon the face, and light spots are diffused over the head, from whence the influence extends to the trunk, while the parts about the jaws are distended with blood, and the eyes are distorted and a red flush is diffused over the limbs, the ears disturbed by ringing sounds, a black discharge flowing from the nostrils, and gaping ulcers are formed in the passages, all are highly characteristic. But that which Seneca then considered a new disease, has been called such many times in succeeding ages, disappearing for a period of longer or shorter duration, only to reappear in one of its several types. By the earlier medical authors, whose works have been handed down to us in imperfect fragments, all epidemic diseases were concluded under the general term of Loimos or Pestilence; the whole family of plagues was thus grouped together. Slowly, one after another was singled out for more accurate description, but it was not till the beginning of the 17th century, that scarlet fever was separately described, and then by the Spanish and Italian authors under the terms Garotilla and morbus strangulatorius, names in themselves sufficiently descriptive to designate the disease.

Even long since that period it was, by many, confounded with measles, to which fact we may ascribe the mortality of some nominal epidemics of that disease. The accounts given by these authors refer to epidemics which prevailed in the interval between 1610 and 1650, during which time it was marked by fearful mortality. How completely it had lost its formidable character

when Sydenham describes its appearance in London, in 1690 to 1695, may be inferred from his assurance that it is "a disease more in name than reality." Had Fothergill's reading been confined to Sydenham's account, he might well have regarded the epidemic, which came under his notice in the same metropolis in less than a century, as a new disease. Equally great have been the subsequent changes as recorded by the European writers, to whose works I must refer you for additional information on this point, and especially to the elaborate article by Dr. Tweedie in the Cyclopedia of Practical Medicine.

The earliest record I have been able to trace of its existence on this continent, reaches back to the year 1734—5 at which time it was prevalent in America and Europe simultaneously; and so great was the mortality caused by it in Boston, that we find the number of deaths in those years raised from 458, the number of the year 1733, to 528 in '34, and 617 in '35. At the same period the interments in the burial grounds of Christ Church and St. Peters in Philadelphia, rose from 96 to 144, and a like increase occurred in the same places from a similar cause in 1742. When we recall to mind the difficulty of communication between the Colonies at that early period, and the consequent infrequency of intercourse, and reflect on the small probability that those who were sick or so recently convalescent, as to carry about them a contagious influence, could endure the fatigue and exposure necessarily incident to the only modes of conveyance then known, we shall be disposed to adopt the solution afforded by the prevalence of a wide spread epidemic influence, as the means of propagation.

There is an exceedingly interesting paper by Cadwallader Colden, Esq., of New York, published by Dr. Fothergill in the 1st volume of the "Medical Observations and enquiries by a Society of Physicians in London," dated Coldenham, in New York, October, 1753, which throws unexpected and important light on the history of the disease on this continent. The whole document is one of great merit,and deserves to be borne in mind as a favorable specimen of our earlier medical literature. Mr. Colden remarks, "I have seen it only in my own family, and in a few neighbors in the country, to whom I sometimes give advice when they cannot obtain assist-

ance otherwise, having laid aside the practice of physic, upwards of twenty years. What I chiefly learned was from the late Dr. Douglass* of Boston, a gentleman of great skill in medicine, and an accurate observer, having corresponded with him while this distemper was frequent in the part of the country where I live."

"The first appearance of the throat distemper was at Kingston, an inland town of New England, about the year 1735; and as this town has no foreign trade, it may be concluded that the disease was not imported. It spread from thence and moved gradually westward, so that it did not reach Hudson's river till two years afterward. It continued some time on the east side of Hudson's river before it passed to the west, and appeared first in those places to which the people of New England resorted for trade, and in the places, through which they travelled. It continued to move westerly till, I believe, it has at last spread over all the British colonies on the continent."

"Though what I have mentioned seems evidently to show that the disease was propagated by infection, yet it did not spread in the same manner contagious distempers usually do; for children and young people only were subject to it, with a few exceptions of some few above twenty or thirty, and a very few old people who died of it, neither did it spread equally in all places that were equally exposed to the infection. The poorer sort of people were more liable to have this disease than those who lived well with all the conveniences of life. It has been more fatal in the country than in the great towns. People of a scorbutic habit were most subject to it, and they who fed on pork or lived in wet and low grounds. In some places only a few persons or families were seized, while in others all escaped. In some families it passed like a plague through all their children, in others only one or two were seized with it. Some were seized with it at such a distance from the infected, that it could not be conceived in what manner they could receive the disease by infection. Some families had the disease mildly, while others, in the same place and at the same time, had a most violent sort."

*In a letter of Dr. J. C. Warren reference is made to "a treatise of Dr. Douglass, of Boston, on this subject" of the date of 1736. I have not been able to meet with the work.

"Ever since it came into the part of the country where I live (now about 14 years) it frequently breaks out in different families and places, without any previous observable cause; but it does not spread as it did at first: sometimes a few only have it in a considerable neighborhood. It seems as if some seed or leaven, or secret cause, remained wherever it goes; for I hear of the like observation in other parts of the country.

"In different years, and different persons the symptoms are various. In some seasons it has been accompanied with miliary eruptions all over the skin; and at such times, the symptoms about the throat have been mild, and the disease generally without danger, if not ill treated."

Such is the earliest record I have seen, by an actual intelligent observer, of the disease on this continent; and it tallies accurately in all respects with more recent observation. As now, so then, it varied in the violence of its attack, in the absence or presence of eruption, and the degree of mortality; and then, as now the different forms prevailed simultaneously and separately, and there were periods of epidemic prevalence with occasional cases occuring sporadically. The same uncertainty marks its commencement and mode of propagation.

The next earliest notice of the disease on this continent by a medical author that has met my eye, is an exceedingly interesting manuscript tract on the subject, by Dr. John Kearsley of this city, now in the possession of Dr. George W. Norris. He says: "In the spring, summer and autumn of 1746," nearly ten years from the time of its first appearance at Kingston, "and indeed some part of the winter of the same year, this disease since called, by the learned Huxham, Fothergill and others, the angina maligna, or the putrid and ulcerous sore throat, prevailed in this and the neighboring provinces, and spread itself with mortal rage in opposition to the united endeavors of the faculty. Like to some new diseases, till their nature and constitution are known, it swept away all before it. It baffled every attempt to stop its progress, and seemed by its dire effects to be more like the drawn sword of vengeance to stop the growth of the colonies, than the real progress of a disease. In the New England Governments, as their annals no doubt will show, the stroke was felt with great severity. Villages were almost depopulated, and parents were

left to bewail the loss of their tender offspring, till Heaven, at last, whose almighty power we all must own, graciously checked its baneful influence. This disease as it then appeared, and since within these few years, had most of those symptoms to characterize it which those learned gentlemen, we have mentioned, have handed down to us. With us it generally affected children, or those under puberty, whose lax solids and spongy habits were more fitted to receive the floating miasmata of a putrid atmosphere, than those whose textures are more solid. It also affected those who lived in low, wet, marshy places, more than those who lived in higher situations. It happened with us, as it did with them in England, after much cold wet weather, succeeded by heat." At this period we find the burials in the grounds of Christ Church, rising to a number even greater than those in the year 1741, in which a pestilence, the nature of which is not recorded, prevailed in the city, and by the law that more than one form of epidemic disease is never prevalent at one time, we are justified in attributing this great increase of mortality to scarlet fever. I have derived these statements respecting the prevalence of the disease in this country, chiefly from Webster's elaborate work on Epidemic Diseases, which exhibits the dates at which it prevailed, and the general mortality of each year, without giving any minute detail.

That this disease should affect both sexes equally might be reasonably inferred from the want of any circumstance, which should cause one to be more liable to its influence, than another. From partial observations, varying conclusions on this point have been reached by different authors. I need not now inform you that no accurate results can be obtained by the most carefully arranged tables, unless the observations be conducted on an extensive field. Unhappily for humanity, as well as for the scientific character of our country, the efforts made by the medical profession to arouse attention to the importance of an uniform system of Registration, have not yet accomplished an object so earnestly to be desired. We are, therefore, compelled to resort for extended statistical statements to foreign states. Thus while the private observation of Dr. Tweedie in London leads him to assert, that it is more common in girls; and from the same source, Rilliet and Barthez reach the conclusion, that it is more common in boys, and Dr. J

F. Meigs thinks it "probable that while under puberty, it attacks the two sexes with about equal frequency, and after that age it is most common in females," the reports of the Register-General of England and Wales, quoted by Dr. Gregory, show that in 1838, it destroyed, in London, 747 males, and 777 females; in 1839, 1214 males, and 1258 females. Throughout England and Wales (exclusive of the metropolis) in 1840, 8927 males, and 8935 females. Though in each of these statements there is an excess of females over males, it is so small a fraction of the whole number, that it cannot fairly be ascribed to any especial liabity of one sex to the complaint. If the one sex were more subject than the other to the disease, the difference would be more marked. Extended observation would in all probability change the result.

But while I believe sex exerts no influence over this disease, the relations which *age* bears to it are very important. It is decidedly a disease of childhood, and that, not because all persons are exposed to it in the earlier years of life, and those who are susceptible take it then and lose their liability, but because there is something in the condition of the system during infancy and adolescence, which renders those periods of life especially subject to the disease. Thus you will find that Dr. Kearsley and Mr. Colden both refer to the fact, that the force of the epidemics they witnessed fell upon children, and attempt to account for this preference. It must not be overlooked, that at the date of the visitation they witnessed, the adult inhabitants of the colonies had passed through infancy and youth without exposure, so that their susceptibility could not have been exhausted by a previous attack. That adults are liable to it in rare instances, with great, even fatal severity, cannot be denied. The general expression is, however, correct, that Scarlet Fever is a disease of infancy and childhood.

(To be Continued.)

Case of Hydrophobia in South Easton. Communicated by ABRAHAM STOUT, M. D., of Easton, Pennsylvania.

Mr. Bartholomew, of South Easton, owned a small dog, which he presented, about the beginning of March, 1848, to Mr. Rose, of our borough. After the dog had remained at Mr. Rose's,

during the night, he returned to his old home. In the afternoon of the same day on which the dog returned, he bit the daughter of Mr. Jacob Brown in the face. The dog then disappeared and has not been heard of since. The wounds in the little girl's face were healed, and she enjoyed very good health till Thursday the 20th of April, when Dr. Slough was called to prescribe for irritability of the stomach, attended by occasional vomiting. On Friday she appeared better, but seemed unusually depressed in spirits. At ten o'clock, P. M., on Saturday, the 22d, her father offered her a drink of coffee, and the moment she saw it, she started back in apparently frightful agony.

The father admonished her and told her not to do so; she replied that she could not help it. She then took coffee into her mouth but swallowed it with great difficulty. The sight of coffee or water continued more and more dreadful to her till Sunday morning at six o'clock, when Dr. Slough was again called in. The Doctor was at once satisfied that the girl, about five years old, labored under hydrophobia, and convinced the family of the fact by pouring water, in her presence, from one vessel into another, which threw her into painful spasms. Pressure on the cicatrix of the wounds had the same effect. Dr. Slough proposed a consultation with me. We met at ten o'clock A. M., on Sunday the twenty-third, and concluded to give chloroform and ether a trial in the case. As neither Dr. Slough or myself had used these powerful agents, we requested Mr. Crane, a practical dentist, to put the patient under their influence. Mr. Crane used the chloroform in the first place, and soon put the patient under its influence, when all the symptoms of hydrophobia disappeared; but the disease returned, with an apparent increase of violence, and continued so until the chloroform was again resorted to. After several repetitions of the chloroform, without gaining any advantage over the disease, ether was resorted to; but like the chloroform, it had no farther effect than to suspend the disease so long as the system was kept under its influence, and when consciousness returned, the symptoms of hydrophobia increased, and the sight of a polished surface, such as Mr. Crane's inhaler, would cause her to throw herself back, and bring on spasms of the muscles. No other medicine was used, either general or local, nor was she bled. She expired at five o'clock P. M., six hours after the first use of the chloroform, in the presence of

Doctors Swift, Slough, Sloan, Abernethy, Wagner, Innis, and myself.

Sixteen hours after the patient's decease, I inspected the body, in the presence of Doctors Swift, Slough, Wagner, and Abernethy. The upper part of the scull was first removed, when the blood vessels of the dura mater were seen to be unusually distended, and bled so much from their ruptured orifices as to mark the surface of the dura mater with numerous streaks. After removing the dura mater, the smell of sulphuric ether was as apparent from the brain, as it is from the mouth of a bottle that contains some of that fluid. I called the attention of the physicians who were present to it, and they all acknowledged the truth of the fact. The brain was greatly engorged, and in a groove formed by two of the convolutions, a coagulum of blood existed. By slicing off portions of the medullary part of the brain, the blood vessels, on the surfaces, formed unusually large red spots. No extravasated blood existed in the cavities of the brain.

The lungs appeared in a perfectly normal state. No engorgement of the lungs existed, and from no part of them could we perceive the smell of sulphuric ether; nor did we discover any traces of ether in the cavity of the abdomen or in the stomach and bowels.

Remarks.—From a superficial glance at the above case, it does not appear to possess sufficient interest to deserve a place in a medical journal, nor to be worthy of the time required for its perusal by the respective readers, inasmuch as the symptoms of the disease and the termination of the case are like all the numerous cases of hydrophobia that are upon record; but when we take into consideration the discovery of ether, in its pure and undecomposed state, in the brain, and the only manner in which it could possibly have found its way there, it will incontrovertibly prove the manner in which aerial poisons find their way into our systems, to act as remote causes of fevers and perhaps other diseases. And, moreover, the fact of extensive engorgement of the brain, produced, without doubt, by the chloroform and ether, points out the organ upon which the inhaled poisons principally act.

As far as my experience has gone in the use of chloroform and ether, I feel satisfied that they do not operate upon any disease directly, but upon life itself. A disease is only

brought to a stand by them in proportion and as long as they suspend life. When their effects cease the disease will resume its former progress. As long as we are not in possession of a gage (Vitalometer) to determine the degree of life that we can suspend with safety, so long I shall consider chloroform and ether dangerous agents; and if they are continued to to be used at random, they will in the future, as they have hitherto done in many instances, supersede the disease in destroying life.

Philadelphia, Feb. 24th, 1851.

To the Editors of the Medical Examiner.

GENTLEMEN,—I enclose herewith for your valuable journal an account of Cholera as it appeared in the kingdom of Siam during the year 1849, by His Royal Highness T. Y. Chaufa Mongkut.

It is an extract from the "Supplement to the Bankok Calendar, being a series of communications from His Royal Highness, T. Y. Chaufa Mongkut," printed at Bankok 1850, for a copy of which I am indebted to the politeness of Dr. Hopkinson, U. S. Navy, who has very recently returned from a cruise in the East Indies.

His Royal Highness, Chaufa Mongkut, wears the yellow robe of the Talapoins, and holds the office of High Priest of the Budhist religion. He declined his right to the throne of Siam, in favor of a younger brother, Momfanoi. He speaks English perfectly; the following communication is an evidence of his ability to write it.

According to the government census of 1828, the population of Bankok was 401,300 souls, of which number 360,000 are Chinese or their descendants.

I am, very respectfully, &c.,

W. S. W. RUSCHENBERGER.

Cholera. Communicated by His Royal Highness T. Y. CHAUFA MONGKUT.

The Cholera made its appearance first at Pinang in April last year. Vegetation decayed and turned yellow; and after about a fortnight, the Cholera commenced its ravages, many persons dy-

ing in four or five hours after its first symptoms appeared. It prevailed about three weeks, and then gradually diminished and seemed to remove to the Malay Coast east of Pinang. It spread into 15 Malay villages which are tributary to Siam, viz.—Kedah, &c. Then into the southern Provinces of Siam, as Patani, Songkhla, Patalung, thence passing up the coast on the west side of the Gulf of Siam, reached Chiyah or Bhumriang early in June. Thence it seemed to pass directly to the mouth of the River at Paknam, not affecting the towns on the Tachin or Meklong rivers, or the villages, Banglem and Bangtabhun. It prevailed at Paknam and vicinity, about June 11th, and passing along both banks of the river, appeard at Bangkok on the 15th, very rife on the 17th and 18th, and such was its violence and fatality, that 2 and 300 inhabitants were swept off per day. It continued to increase till on the 23rd, when Chau Phya Bodin Decha, the celebrated Commander-in-Chief of the Siamese army, fell its victim, together with more than 500 persons residing within the walls of the city. From the 23rd, the violence of the disease somewhat abated, and the number of deaths diminished gradually from day to day, until July 16th, at which date things began to assume an appearance of usual tranquillity.

His Royal Highness, T. Y. Chaufa Mongkut gave direction to his servants to visit three of the principal burning or burial places about Bangkok, viz., Wat Saket, Wat Tinlen, and Wat Banglamphu, to visit them daily and take correct account of all the corpses of persons dying of Cholera—brought there to be disposed of by burning or burying. This was done every day for four weeks, commencing June 17th, to July 15th, and the following table shows the number of dead bodies carried to these three Wats or Temples in Bangkok during two weeks in June and two in July.

	Wat Saket.	Wat Tinlen.	Wat Banglamphu.	Total.
June 17	15	12	8	35
18	45	57	38	140
19	135	60	68	253
20	189	97	83	359
21	291	122	80	493
22	344	190	135	669
23	365	200	131	696

24	344	150	94	588
25	226	70	96	382
26	182	50	75	307
27	153	52	66	271
28	86	30	59	185
29	71	60	50	181
30	64	25	43	112
July 1	31	59	41	131
2	53	41	20	114
3	26	26	13	65
4	31	31	12	74
5	16	26	11	53
6	21	26	16	63
7	13	20	14	47
8	14	10	3	27
9	11	15	15	41
10	12	10	16	38
11	4	10	9	23
12	7	10	8	25
13	11	10	5	26
14	7	12	4	23

Total in 28 days, 5457;—average per day, 137. Greatest mortality on the 23rd of June.

From various accounts His R. H. and other considerate persons believe the number of bodies carried to other places from the city and its walls were not more than 1000, besides those above and below—and on the western banks of the river, might be about 6,000 more. This estimate is made by comparing the deaths in various groups of houses extending over limited spaces. It was judged that about one-tenth of the population were swept away by the cholera.

The estimate is placed higher by some ignorant persons, whose fears were unnecessarily awakened, so that they could not give the subject sufficiently careful attention. None, however, doubted but that about 15,000 souls were swept away by this pestilence. Notwithstanding the calamity was so fatal, it fell generally and mostly on prisoners, slaves and common people; but persons of distinction and noblemen, dwelling in high habitations or in floating houses, where the tide flowed regularly, died only in very small numbers. A few princes and princesses and some noblemen of rank, however, fell victims to the scourge.

But those persons who were absent in China and Batavia, had they returned without having heard the tidings, would scarcely apprehend or perceive that any thing extraordinary had happened, or that there was any observable difference or diminution of the people by the death of one-tenth. His Royal Highness regrets that the Siamese Government could not secure an exact census both of the living and the dead—on account of the excitement that prevailed. He has endeavored to ascertain the number of deaths compared with former attacks of the disease. From Bangkok it spread in every direction. On the west to Tachin, Nakon Chaisi, Suphan, Rajaburi, and Mehlong. On the north —to the farthest provinces; and then down south again to Chumpon and Chai yat on the Gulf formerly mentioned,—and on the east side of the Gulf all along to Kambuja. He has learned that the disease raged most at Ayudia in the early part of July, a few days later than at Bangkok. Here the deaths were rare in houses situated within the fosse of the city and in floating houses, but more numerous on the Ta Khian canal. The disease did not reach Pitsanulok, north-eastern province, till late in August. And in the central northern provinces of Sawankhalok and Sukkothai, and western dirtrict of Kampeng pet—not till early in September. Its appearance in the northern parts of Siam, south of Chiang Mai was late in July and early in August. His Royal Highness requested several officers of various small towns to furnish him accounts of the number of persons who perished by the Cholera, together with general statements in regard to the whole population; and he was assured that about one-tenth died in most of the places; except, Anghin, Bangphra, &c., on the east side of the Gulf down to Chantibun, in which places there were but few deaths. The following are *particular examples.*

At Wat Bawarniwes where His Royal Highness resides, the priests and laymen amount to 396;—26 of them died in June. In some places, the proportion was greater. Samkhok—whole population 1254; died 96. The town of Tha Dhani, province of Sawankalok had a population of 558, died of Cholera, 57. At Kahuyang near Kampeng pet on the N. W., out of a population of 1039, 103 died.

At Anghin, east of the Gulf, with a population of 1,025, only

5 died; while at Blangplasoi, only a few miles distant, the deaths were very numerous, which is a remarkable circumstance. But the former is high land, receding from a muddy shore, and the latter low ground terminating in banks of mud and sand. Anghin is subject to a variety of terrible diseases, as fovers, dysentery, small pox, &c., which occasionally prevail in other parts of the country. It is exposed to all winds but the east.

The appearance of the Cholera was unknown till 1819; it was heard of first in India. Some Siamese from Trang, on the west coast of Siam, witnessed the disease, and immediately returned to Siam, and brought the astonishing tidings before the Cholera reached Siam in 1820. It first broke out in Pinang and Trang and followed the same course as this year, by Chaiyah, and Paknam to Bangkok. Thus in 29 years, from 1820—1849, the Cholera has raged twice with great violence. During other years of this period, it has occasionally appeared for a week, but the cases were few.

His Royal Highness thinks it reasonable to suppose that it originates from the influence of volcanic and poisonous gases, or vapor which would be drawn forth by the attraction of the heavenly bodies in their various conjunctions and oppositions, but almost all the officers of government and the people generally, suppose the Cholera to be an attack of an army of demons, or cruel and malicious spirits, who come invisibly, to seize mankind, and make them their companions or servants, or that this calamity was sent by God, as an expression of his displeasure. His Royal Highness and his associates were greatly displeased with such unreasonable, delusive superstitions, and having no confidence in such views, many have become his enemies and strongly opposed him on this subject. The people generally endeavored to check the spread of the Cholera, and protect themselves and families by offerings and prayers to god, gods, and goddesses and evil spirits, with numerous incredulous and ridiculous ceremonies.

His Royal Highness greatly regrets his past neglect to observe the thermometer and barometer, that he might have noted the state of the temperature, and atmosphere at the time of the first attack of Cholera in 1820. He had these instruments when he was 16 years old, but he had no person to explain their use and

importance, and no minutes were made of what they indicated at that time. But he well remembers that the cold was regularly increasing from day to day, from December, through January, and then diminishing till the close of February, when it was very warm. This he recollects as being a uniform process from his youth to the year 1818, when in May, the heat was unusually intense, and in the December and January following, the cold was more severe, but in 1820, before the Cholera commenced, the cold was less, and the heat greater, so that the people said they have never seen the like. In April of that year, the Small Pox raged with fearful violence, and then followed the Cholera in much the same manner as this year. It occurred on the Malay Peninsula in March, when the sun was near the equator, about the vernal equinox, Saturn and Jupiter being in the node, in the signs of Pisces and Aries.

During the 24 years from 1820, whenever the Cholera made its irregular appearance, it has always been when the heat was greater, and the cold diminished or discontinued for many days. Previous to the year 1848, His Royal Highness never observed the thermometer to be above 98° in April, May or June, and its lowest range in winter 60°, and that only for an hour or two in the morning. There was no day when it did not rise to over 70° in the course of the day. The cold has decidedly diminished in Siam since 1818. As evidence of it, we have only to look at the garments of the people. The jackets they used to wear, are scarce and seldom to be seen, almost wholly gone out of use, as this winter '49–50. But in the winter of '48–49, it was cold in November and December, and increased for nearly the two months. Sometimes the thermometer was down to 57° and 58° and continued so for 3 or 4 hours every day in the middle of December, and many successive days, did not exceed 70°. After the first of January, the season soon turned to be hot. This increased till the latter part of April, so that when the sun was in the zenith at Paknam, Bangkok and Ayudia, the temperature was 106°, 105° and 104°, and was not less than 100° till about sunset, and late at night, when it was 98° and 97°. The thermometer shows that the heat was greater in April and May 1849, than for many years before. But when the Cholera appeared in June, the heat began gradually to diminish to 90°, 89°, 88°, and 87°

during the hottest hours of the day, and 81° or 80 in the night; and the barometer showed that the atmosphere was very rare. The difference of similar remarkable situations of planets or heavenly bodies on this and previous occasions of Cholera, was this,—The planet Jupiter had crossed the equinoctial point under the planet Saturn, which was with the node in the same geocentric sign between Pisces and Aries on the last occasion: but on this occasion the planet Mars instead of Jupiter, on the 14th of May last, had crossed the equinoctial point under the planet Saturn, which was on the same place of its former revolution and opposed with the node, which little proceeding from opposition between the signs of Virgo and Libra.

His Royal Highness and his associates have examined whether there were any other such conjunctions, and find none for thirty years or fifteen years past. Hence he concludes that the Cholera has been occasioned by these conjunctions, drawing out the poisonous or deleterious gases, engendered by iron ores and mineral substances, as he has observed that its ravages were greater where such ores and mineral substances abounded, than in sandy and alluvial grounds.

His Royal Highness wished to write also in regard to the curative treatment of Cholera, but regrets he has not the leisure. He does not know how to state many things which would be appropriate to a medical work. He begs leave therefore, briefly to state, that he thinks Epsom salts dissolved in cold or warm water, more efficacious in curing Cholera than any other one remedy, and has saved many patients with it. But the quantity must be much greater than usually employed for other diseases, or it will not prove efficacious. His Royal Highness' adopted son, Pheng Napoleon, has saved many from the Cholera in this way. The readers who desire to cure with Epsom salts must ask Mr. P. Napoleon for the manner of its use or employment, if they do not know.

His Royal Highness would also recommend the free use of the Jack fruit, even the dried fruit as food during the Cholera, from his own experience and observation of its effect in preventing the symptoms of Cholera. Frequent smelling of camphor, or scenting the room with it, and fumigation by burning Gum Benjamin is also beneficial.

Chinoidine in Intermittent Fever. By LEWIS SLUSSER, M. D., of Canal Fulton, Ohio.

Interesting as may be the history of rare and anomalous cases, they afford less of that which is of practical utility, than contributions upon diseases of more common occurrence.

Actuated by this belief, I am induced to make public my experience in the use of Chinoidine in the treatment of intermittent fever. The present high price of the alkaloid quinine, and the probability of its being maintained, render it an object of no small pecuniary consideration to country practitioners, who are compelled to dispense their own medicines, to obtain some reliable substitute less expensive.

Malarious fever is the endemic of this locality, and among its subjects, are a full quota of cases denominated charitable. The same remark will apply to many other sections of our country. For the last several years, impelled by motives of economy, as well as by a desire of professional improvement, I have *experimented* not a little with reputed anti-periodics—officinal and non-officinal. It would be an endless task, were I to attempt enumerating them. It may be proper, however, here to mention, inasmuch as chloroform is at present going the rounds as a succedaneum, that soon after its introduction into practice, I was led, from a knowledge of its power over the nervous system, to give it a trial; which I did in repeated cases, in different forms, and in varied combination; but found it entirely inefficacious—unworthy of the least confidence.

In the treatment of simple, uncomplicated intermittent, of a tertian or quartan type, I have as yet found no substitute equal to chinoidine. In quotidian cases, I have not succeeded so well; from the circumstance, as I believe, that the short intermissions will not allow sufficient time to bring the system under its influence. Where I could induce the patient to continue its exhibition through several intermissions, the disease invariably succumbed.

By medical statistics, or numerical analysis as it is termed by some writers, we are enabled to determine satisfactorily the value of a certain remedy in the cure of a specific disease. Success in a few isolated cases, is not sufficient to establish the merits or demerits of any article. A non-observance of this fact

has often tended to bring reproach upon the writer, and consign his vaunted remedy to unmerited oblivion.

I have kept an accurate record of forty-two cases of intermittent, treated exclusively with chinoidine. These were of persons residing near at hand, coming almost daily under my observation, and the results of which I could note with confidence. Itinerant cases, I did not record. Of these forty-two cases, twenty-six were quartans; the balance, sixteen, were tertians. In all, when given in the mode and manner I shall hereafter direct, it was checked, without the recurrence of another paroxysm. Of the quartans, two relapsed on the eighth, and three upon the twenty-eighth day. Of the tertians, one relapsed upon the ninth, and two upon the twenty-first day. All of these were again checked by the same mode of treatment, and with the residue, have thus far escaped a relapse. According to this table, the proportion of relapse cases, is less than one-fifth of the whole number; a result which I think will compare favorably with the quinine treatment.

Upon a principle in therapeutics, that a combination of several articles of like properties will increase the aggregate effects, I have for the last year been prescribing chinoidine in accordance with the following formula.—

℞ Chinoidine ℥j.
Tart. Acid,
Cinch. Rub.,
Cascaril. pulv.,
Val. Rad. pulv., *aa.* ʒij.
Ex. Quas.,
Ex. Gentianæ, *aa.* ℥ss.
Mucil. Acaciæ, q.s.
M. Divide into 480 pills.

Of these, I usually prescribe to an adult, sixteen, two to be taken every three hours, commencing immediately after the subsidence of the last paroxysm, and continued during the daytime until all are taken. To guard against relapse, I order six on the twelfth and thirteenth day after, counting from the last paroxysm; and the same quantity repeated on the twenty-sixth and twenty-seventh day.

The preparation of chinoidine that I have employed, was that

manufactured by Powers & Weightman, Philadelphia. The combination with Comp. Ex. Colocynth recommended by them in a circular accompanying the article, I have found objectionable, as being apt to disturb the bowels. I have used it successfully in conjunction with piperine, but the combination given above I have found from experience to be the more efficacious in meeting the indications.

In conclusion, I would remark, that I consider chinoidine entitled to more consideration than it has yet received from the profession, as a successful and comparatively cheap remedy in the treatment of intermittent fever.

CLINICAL REPORTS.

Summary of the course on Demonstrative Surgery in the University of Pennsylvania, March 1st, 1851.

(Reported for the Examiner.)

At the close of our last paper, a brief reference was made to some of the cases shown at the end of the hour, and especially to a rare form of dislocation of the femur. As the demonstrative course terminates on the 1st of March, in order to facilitate the arrangements connected with the extension of the term of lectures to the 1st of April, we have only the cases of this day and the details of the dislocation to report.

Large Tumor in the Ham.

The first patient brought forward by Dr. Smith on the 1st of March, was an example of some of the difficulties attendant on the diagnosis of swellings found in the Popliteal Region. The patient, aged about 30, was a day laborer, and whilst engaged, Sept. 1850, in carrying corn to the third story of a warehouse, felt something give way behind his left knee joint. This was soon followed by pain and swelling to such a degree, as to in-

terfere with his ordinary labor. A few days afterwards, when Dr. Smith saw him, the tumor was about the size of a small egg; situated on the inner side of the ham; not moveable; slightly elastic; not painful on pressure, but with an obscure sense of pulsation and fluctuation. From the difficulty of deciding as to its character, a palliative treatment was adopted, with but little relief and without arresting the increase of the tumor. On his re-appearance to day, the tumor was found to be larger than an orange; quite tense; evidently beneath the fascia; could be partly diminished by pressure, but was now free from pulsation. Another small tumor, similar in appearance to this, at its commencement, was now also found in the right ham ; and the right elbow beneath the triceps tendon presented something of the same kind, with stiffness of the joint, perfect extension being impossible. Being satisfied, therefore, that no aneurism existed in the ham, but that the disease was a bursal tumor, opening into the knee joint, the Dr. determined to evacuate its contents by a valvular puncture, and be guided in the after treatment by circumstances. With this view he introduced a small trocar and canula beneath the skin; carried it to a short distance from the point of entrance; tapped the tumor on the opposite side to that where the skin was opened, and drew off over four ounces of clear straw-colored synovial fluid. The instrument being then carefully withdrawn, so as to exclude the air, the opening was closed. In about ten days the cyst again filled, and the patient is yet under treatment.

Hard and Soft Cataract.

The next patient shown, was an elderly man from Montgomery country, who was suffering from double cataract, one of them being of fifteen years standing, and both apparently soft in their consistence. The pupils being well dilated by belladonna, Dr. Smith determined to operate on both eyes, and with the left hand introduced the needle into the right eye, lacerated the capsule and evacuated a softened lens, enabling the patient to see immediately. Then changing the needle, he introduced it with the right hand into the left eye, and finding the cataract firm and hard, depressed the lens out of the axis of vision, so as to enable the patient to see with both eyes before leaving the lec-

ture room. Subsequntly the symptoms were of a trifling character, and the inflammation quite moderate. The patient's pupils are now entirely clear.

Case of Vesical Calculus, removed by Lithotomy.

On the removal of this patient, Dr. Smith next presented a man laboring under stone in the bladder, of about two years duration. This patient, aged forty-three, had lived in Philadelphia for the last seventeen years, and previously in Ireland; knew no cause for his disease except intemperance, and this he ascribed, during the last eighteen months, to his sufferings since the formation of the calculus. At one time he had drank over one pint and a half of whiskey per diem, but for the last six months had taken much less, and lately abstained almost entirely. He had all the symptoms of stone well marked, his constitution was giving way under suffering and bad habits, and there was also considerable ossification of his arteries. Believing from the apparent character of the stone as shown in sounding, from the general symptoms, and from his domestic circumstances, that lithotripsy was not adapted to the case, a consultation had advised him to submit to lithotomy. Sounding satisfied every one who was near, that the stone was a hard one, as with silence in the room, the click of the sound could be heard some distance. It was also deemed of considerable size, and Earle's forceps were kept in readiness for service if it should be necessary to crush the calculus, previously to its extraction. The patient having been, therefore, as well prepared by previous treatment as was possible, was placed upon the table in the ordinary position for lithotomy, and cut by Dr. Smith, (assisted by Drs. Horner, Wallace, Neill and Page,) by the usual lateral operation and the gorget. No anæsthetic was resorted to, as it was deemed unadvisable to attempt etherisation in the case of one so habituated to liquor, and with such disease of his circulatory organs. On opening the bladder, the stone was found to be attached to the left side of the viscus, and very rough and large, rendering it a difficult matter to place it fairly in the grasp of the forceps. Considerable care therefore was necessary in freeing it from its attachments and extracting it, but by cautious manipulation and further dilation with the bistoury, this was successfully accomplished. The operation, including the period consumed in the

efforts at extraction, (which constituted the great difficulty,) occupied 17 minutes. On examination, the stone proved to be a rough and large one, measuring two and one-eighth inches in its long diameter, and one inch and five-eighths in its transverse measurement. On chemical analysis by Dr. Rogers, the Professor of Chemistry, it was found to be phosphate of ammonia and magnesia, together with a small amount of phosphate of lime, with a nucleus the size of an English walnut, resembling a mulberry calculus. Its weight was ℥ij. gr. xvii. besides some portions crushed in the efforts at extraction and lost. From the thickness of the perineum and the ossified state of the blood vessels, the hemorrhage was free from branches of the hemorrhoidal and transversa perinei, each of which required a ligature. A catheter being then left in the wound, the man was placed in bed as usual and rallied well from the operation. Twelve hours afterwards, the urine ran free and clear through the catheter, and he has not since had a bad symptom. Much of his comfort and favorable condition has been due to the devoted attentions of the members of the class,* who nursed him most sedulously for some time after the operation. The urine has now passed through the urethra, the perineal wound is healing, and he is now (March 25th,) nearly well.

Amputation of the Breast.

Immediately after this patient was carried to his bed, Dr. Smith introduced a lady who had been laboring for several months under scirrhus of the mamma of the right side, the result apparently of inflammation and thickening consequent upon suckling. During lactation, four years since, she had suffered from a milk abscess, and from the irritation consequent upon this, scirrhus had developed itself. The tumor was now about the size of an apricot, accompanied by a tendency to retraction of the nipple, and the other well marked signs of Cancer. After moderate etherisation the Dr. removed the breast in the usual manner, extending the dissection slightly into the axilla, in order to free it from all possible points of diseased structure. The wound was then dressed in the ordinary manner, and has healed rapidly.

*Messers Vogdes, Hempstead, Little, Jackson, Wilson, Horner, Ware, Kieffer, &c.

These operations having occupied the hour, the demonstrations were closed by a few valedictory remarks by Dr. Horner.

Dislocation of the Femur directly backwards.

In referring to the rare character of the dislocation in the last report, want of space prevented our presenting its details. They are as follows: A man aged about 35, whilst assisting to push a line of coal cars, was jammed with a companion between two of them. As well as he can recollect, he was struck on the buttock and jammed against the front car. His companion was killed, the patient owing his life to the death of his fellow-laborer. The terrible contusion, swelling, &c., which continued for three weeks after the accident, prevented anything like an accurate diagnosis, though a fracture of the neck of the femur was suspected. At the end of five weeks, as he suffered much pain in the hip and down the limb, and was unable to bear his weight on the leg, a further and more minute examination by Dr. Horner, detected a dislocation of the head of the femur upon the ischium, between the spine and the tuberosity. The signs were as follows:—1st, increased width and flatness of this buttock. 2d, A hard round tumor (head of bone) beneath the gluteus magnus muscle, or rather about the junction of the gluteus medius and magnus. 3d, Very slight shortening, the heel not touching the ground when the pelvis was held firmly. 4th, Foot apparently natural when in bed. 5th, When standing erect, toes can be turned to metatarso-phalangeal articulation of opposite foot and no further. 6th, Toes can be turned out about thirty degrees, and no more. 7th, Abduction of femur imperfect. 8th, Adduction nearly perfect, as also flexion and extension.

Summary of the symptoms.—Perception of head of femur and its motion, on motion of limb. Very slight change in the length of limb. Very slight variation of line of toes, but impossibility of fully inverting and especially everting the foot. Two days after use of pullies as before detailed, eversion of foot possible to 90 degrees; inversion perfect; improved rotundity of buttock; re-appearance of the hollow of the buttock, just above the trochanter major; abduction of thigh easy, and patient fully sensible of a change in the state of the part as well as of more freedom in his motions.

Cases of Plastic Surgery, by Prof. GILBERT. *Clinique of the Pennsylvania College.* Reported by Dr. H. J. Richards, Clerk of the Medical and Surgical Dispensary.

From our register of surgical cases requiring operative proceedings, I select the two following, as possessing in themselves peculiar interest; the first demonstrating the occasional success attending operations performed for the restoration of parts destroyed by malignant disease; the second presenting some modifications in procedure, rendered necessary by the extent of the injury, and the nature of the structure which remained.

Case 1.—Miss Sarah Queer, æt. 36, residence, Lehigh Co., Pa. Presented for operation by her medical attendants, Drs. Detweiler and Martin, who stated that the patient had lost her nose by lupus, and that the parts had cicatrized, and continued well for four years. On examination, all the cartilages, more than half of the ossa nasi, vomer, the whole of the spongy portion of the ethmoid, and the contiguous portion of the ossa maxillæ superioris, were found destroyed. The site of the organ was occupied by a cicatrix, in the centre of which was a small circular opening about three-eighths of an inch in diameter, around which the integument was drawn into radiating plicæ.

The patient being in good health and condition, the operation was performed in the presence of the class of the College, on

the afternoon of the same day, (Nov. 24th, 1849,) in the usual manner, by bringing a flap of integument from the forehead, after having made preparations for its reception by incisions down to the bone, through the margins of the opening, between the nasal processes of the superior maxilla. The integuments and cicatrix included within these incisions, were separated above and laterally, to be used in the formation of the septum in the construction of the new nose. The patient was rendered insensible to pain by the inhalation of a mixture of chloroform and ether. Under appropriate after treatment the case progressed favorably for about ten days; quick union took place between the flap and its new attachment. At this juncture, erysipelatous inflammation made its appearance, in consequence of which all treatment, except that demanded by this new state of things, was suspended. The patient having recovered, it was found that the septum was entirely destroyed, leaving, however, the union that had already taken place, unimpaired. Fearing the return of the erysipelatous inflammation, it was thought advisable not to perform the supplementary operations for the restoration of the septum, or the division of the pedicle during that session.

Oct. 21*st*, 1850. *Supplementary Operations in the above Case.*

Remarks.—You recognize the subject of a plastic operation performed in your presence last session. You see her in good health, and anxious for the remaining operations. The pedicle you perceive has lost its twist; the probe, however, passes readily between it and the part subjacent. It will be sufficient therefore, merely to freshen the edges, and make incisions into the skin adjacent, and then to attach the margin of each side of the pedicle to the skin, without disturbing the circulation. As to the septum, you perceive that granulations have been thrown out, so as to occlude entirely the nasal cavities. Nothing remains, therefore, but to puncture the solid structure on each side of the mesial line, in the course of the natural apertures, so as to make a communication with the general cavity of the nares; and to keep it patent by means of glass tubes, until the surface is covered with mucous membrane.

These operations were accordingly performed, and the patient

presents the highly improved appearance represented in cut 2, from a daguerreotype by Laughlin.

Case 2. *December 7th*, 1850. H. Hullinger, æt. 21, residence, Gettysburg, Pa. The hideous aspect of the subject of this operation, suggested the forbidding spectacle of the dissecting table—a human face without a countenance—no feature remaining in its integrity, to impart a living expression to the scarred remains. The following cuts from daguerrotypes taken prior to the operation, convey in some degree, the appearance of the unfortunate patient.

This frightful mutilation was the result of a gun-shot wound. The circumstance occurred about 13 years ago, as follows. Being at play in a room with a companion, who was amusing himself with a loaded musket, the piece was accidentally discharged, the whole contents, consisting of an ounce ball and three buckshot with wadding, passed through the face of the patient, entering at the right side, and causing the most extensive destruction of the soft parts of the face, anywhere to be found in the records of surgery. Nearly every bone between the lower jaw and the cranium, was either displaced, or shattered. The nasal processes of the superior maxilla, turbinated bones, vomer, and ossa lachrymalia, were entirely removed, or discharged during the process of healing. The anterior portion of the os ethmoides, as well as the anterior parts of the ossa maxillæ sup., were also carried away. The remaining fragments of the latter bones, with the ossa palati, were disarticulated, and fell together, so as to obliterate the nasal passages. The highmorean cavities were exposed, and there remained only enough of the alveolar margins to contain five molar teeth, which, owing to the loss of intervening substance, approximated, so as to place them considerably posterior to, and consequently within the incisors of the lower jaws. The destruction of soft parts was equally extensive. The buccinator region of both sides, the upper lip, and portions of the masseter muscles were removed. The integument below the eyelids to the extent of about an inch on the right,

and rather less upon the left side, with part of the nasal integument, only remained intact. The parts were adjusted after the accident, without any expectation that recovery was possible. The patient, after a tedious confinement of several months, survived, and has since enjoyed excellent health. His habits are good, and at this time his system is in the best possible condition for a successful operation. This, and his urgent desire for an operation, remarked Dr. Gilbert, have induced me to make an effort to improve his appearance by means of plastic surgery, with the aid of anæsthesia. The destruction of bone and soft parts having been so extensive, as you perceive, it would be a boast to promise more than an improvement. The depression in the centre of his face, the large amount of cicatrix, the consequent scarcity of material, from which to re-construct an upper lip, all present difficulties not met with in ordinary rhinoplastic operations. It is my design to bring the material for the nose from the forehead, except the septum, which can be brought up from the remains of the nasal integument; and to construct the lip by means of two rectangular flaps from the cheeks, drawn together so as to unite at the mesial line.

The usual preparations having been made, the operation was accordingly performed in the presence of the class, by Dr. Gilbert, assisted by Drs. Darrach, Grant and Hunter. When completely under the influence of chloroform and ether, proceedings were commenced by making incisions to include a triangular flap upon the forehead. V incisions were then made for its reception in its new position, preparations having been previously made for the attachment of the remaining fragment of nasal integument, intended for the septum narium. The rectangular flaps, designed to supply the place of the upper lip having been separated from the cheeks, and the cicatrices and remaining soft parts dissected from the bones beneath, an impression in wax was taken, from which a plaster cast was afterward made, representing the shallow highmorean cavities, and the relative position of the superior maxillæ and teeth, to the lower maxillary bone.

The incisions completed, the triangular wound in the forehead was closed by suture connecting the angles, and adhesive strips,

with lint dressing. The flap was twisted on its pedicle, and secured in the grooves for its reception by three double sutures on each side. These sutures were introduced by using double armed ligatures, each extremity being first passed through the integument on the inner side of the sulcus, next through the margin of flap, and lastly brought out through the outer margin of sulcus, thus dovetailing, as it were, the margin of the flap into the corresponding incisions made for its reception. The flaps for the new lip were retained in apposition by two large gold needles and one of smaller size in front; and secured above by stitches of interrupted suture to parts prepared for their attachment. The open spaces on the cheeks were secured as on the forehead, and dressed with lint. Supplementary operations were required to repair the want of union at different points, owing to the feeble organization of the large amount of old cicatrix, which constitutes the material. Operation from 9½ to 10¼ A. M.

I shall abbreviate the daily report made by the senior students who had charge of the case from date of the operation until 16th inst., after which time his condition required no special attention.

Dec. 7th, 5 *P. M.*—No collapse, pulse 68, skin in good condition, patient comfortable. 8½ P. M. Pulse 72, quick. Dr. Gilbert punctured the nose to relieve congestion. Sol. morph. sulph. f. ʒiss., which procured sleep.

Dec. 8th, 12 *M.*—Pulse 72, skin cool and moist. 8 P. M. Pulse 78, organ congested, evacuated blood ad f.ʒiii. 12, midnight. Has had three hours sleep, considerable cough and dyspnœa on awaking, pulse 80. Sol. morph. sulph. Had an inefficient stool.

Dec. 9th, 7 *A. M.*—Pulse 75. Slept well during the morning. 2 P. M. Pulse 80. Ol. Ricini f.ʒss., which procured two good evacuations. 9½ P. M. Pulse 88, sol. morph. sulph. f.ʒiss. et pulv. Ipecac gr. ii.

He continued about the same till the 11th inst.; pulse averaging about 90, with some slight febrile exacerbation and cough towards night; bowels easily acted upon by mild purgatives; skin pleasant, and condition pretty comfortable. Upon the 11th, after a comfortable sleep during the night, he awoke at

7 A. M., with quickness and frequency of pulse. Several stitches were removed; a purgative enema exhibited, as also sol. morph. sulph. and aq. lauro-cerasi. 9 A. M. Pulse reduced to 100; delirium gone.

The patient progressed through the remainder of his convalescence, without any notable symptoms; requiring simply an antiphlogistic and sedative treatment with simple dressings. Satisfactory union took place between all essential points, excepting the anterior margin of the two rectangular flaps, which rendered a supplementary operation for simple hare-lip necessary.

Having completely regained his strength, this, as well as the usual operation upon the pedicle was performed. The former was sufficiently united at the 5th day to allow of the removal of the needles. The latter was performed as in our first case, the object being here to elevate the bridge by permitting the twist to remain. Dr. Gilbert stated that in those cases where the pedicle was divided, and communication through that channel thereby cut off, he was in the habit of making compression upon it for a few weeks prior to the operation, in order that the collateral circulation might be fairly established.

The following cut is from daguerreotype taken eleven weeks after the operation.

Clinic of the Jefferson Medical College. Service of Professors PANCOAST *and* MÜTTER. Reported by G. R. MORRHOUSE, M. D., senior Clerk of the Surgical Department.

Clinic of January 4th, 1851.

Cases presented this day :—Ophthalmia tarsi, of sixteen years duration ; Bronchocele ; Thecal abscess ; Dislocation of Radius, *backwards ;* Caries of Turbinated bones ; Inversion of Toe-nail ; Perforating ulcer of the Cornea ; Spasmodic stricture of Œsophagus ; Congenital fissure of the Soft Palate ; Urinary Calculus ; Scrofulous Eruption of Skin ; Pterygium ; Ozœna ; Syphilitic Ulceration of the Arm, extensive ; Cataract ; Varicose enlargement of the Crural Veins; Amaurosis; Hydrocele; Scrotal Hernia; Irritable Ulcer of the Leg ; Enlarged Tonsils ; Cancer of Breast; Ulceration of Soft Palate ; Psoas Abscesses ; Lipoma Diffusum ; Albugo ; Strabismus convergens double ; Strabismus Divergens ; Ulceration of the Thigh ; Spastic contraction of Pectineus muscle ; Fistula Lachrymalis; with caries of Os Unguis ; Prolapsus Iridis ; Caries of head of Femur ; Conjunctivitis ; Laceration of External Lateral Ligaments of Ankle ; Scrofulous Tumor of Neck, very large ; Fracture of Fibula ; Tumor of the Penis, analogous to a Bubo ; Cancer of Pylorus ; Injury of Lumbar Plexus ; Lepra Syphilitica ; Otorrhœa. Total 44.

The following cases were operated upon before the class, by Prof. Pancoast.

Case 1st, Pterygium Musculosum.

The patient, Thomas Johnson, æt. 24, has for some time past, been laboring under chronic inflammation of the conjunctiva ; this however, has subsided, leaving apparently, as a sequent, the disease which you here see. Upon examining the eye, we find a circumscribed, sub-conjunctival cellular structure, thick, elevated and highly vascular, of a triangular form, having its base incorporated with the plica semilunaris, and its apex extending towards the central point of the cornea. In color, this variety of Pterygium closely resembles muscular fibre, hence the name crassum or musculosum, to distinguish it from the Pterygium tenue which is thin, membranous, and semi-transparent. A Pterygium is not painful, and when confined to the sclerotic conjunctiva, gives lit-

tle inconvenience; its removal, therefore, is seldom desired, until by encroaching upon the cornea, it forms an impediment to vision.

The plan of operation adopted by Prof. Pancoast, which is novel and very successful, is as follows: The patient is seated on a chair, and directed to turn the affected eye *out*, or *in*, as far as possible, according as the Pterygium is situated on the nasal, as it most usually is, or temporal side of the orbit. An assistant supports the head against his breast and separates the eye-lids as in the operation for cataract, or with the spring speculum employed by Dr. P. in Strabismus. The surgeon standing in front, then seizes the Pterygium with a pair of hooked forceps, raises it from the sclerotica and passes a delicate needle armed with the finest silk ligature beneath it, avoiding any encroachment upon the semi-lunar fold. The ligature is then tied, and that portion of the Pterygium on its corneal side removed with a delicate scalpel or curved pair of scissors, as in the old operation. In a few days the ligature comes away, the vessels are effectually sealed, and the risk of their reproduction in a great measure precluded. The cicatrisation of the raw surface left, is aided by slightly touching it from day to day with the caustic pencil.

Case 2d. *Enlargement of the Tonsils.*

John F. Scott, æt. 45, complains of a sense of fulness or obstruction about the throat, which is rendered especially evident during deglutition. His voice during eight years past has undergone marked alteration, becoming rough and thick; he is, moreover, subject to a continual hacking cough, with occasional inclination to vomit. Upon the slightest exposure all these symptoms become aggravated; sometimes his hearing is materially affected, and his articulation rendered indistinct. Upon examination, the tissue of the uvula and soft palate was found œdematous; the tonsils were enlarged to such an extent as almost to close the opening of the fauces; were possessed of little sensibility; feeling firm and resisting to the touch, and presented on their surfaces numerous ragged follicular orifices filled with tenacious mucus.

This chronic state of enlargement to which the tonsil is subject is generally the result of repeated attacks of acute inflammation, and is frequently found associated with the strumous diathesis.

The proximate cause is the hypertrophy of the areolar tissue in which the mucous follicles of the gland are imbedded; the repeated deposits of lymph which take place at each successive inflammation remaining unabsorbed. Enlarged tonsils are seldom painful, but are generally removed to obtain relief from the inconvenience their bulk occasions. When large they offer serious impediment to deglutition and phonation, and frequently produce deafness by blocking up the openings of the Eustachian tubes.

When the enlargement is chronic, local applications will prove of little avail, and partial extirpation becomes by far the most speedy and effectual treatment. To accomplish this, various methods have been proposed; the ligature and caustic have each met with strong advocates among the older surgeons, but excision in modern hands has proved most satisfactory, and at the same time most certain. If excision be decided upon, the operation may be thus performed. The gland being seized with a pair of hooked forceps or a tenaculum, is drawn tense, a probe pointed bistoury well wrapped at its base, to prevent the mouth being cut, should then be introduced beneath the gland, and a portion of the tumor removed, cutting upwards in a line parallel with the arches of the palate. The objection to this operation is, that in children and those in whom the fauces are irritable, the grasp of the forceps occasions such severe coughing as to render the use of the bistoury troublesome and dangerous. It is therefore advisable to employ for their removal the guillotine instrument of Dr. Physick, or some of its modifications. The oval instrument of Fahnestock with a spring forceps attached for the purpose of drawing the gland well within the grasp of the knife, is preferred by Prof. Pancoast. Not being capable of receiving a very keen edge, its use is thereby less liable to be followed by hæmorrhage. In the present case it was used successfully. The glands were removed and the patient ordered to use for a few days, an infusion of white oak bark as a gargle.

Case 3d. Lipoma Diffusum.

Alexander Matheson æt. 24, presents himself with a tumor over the right scapula: it is not painful, but its rapid enlargement combined with the inconvenience and deformity it occasions, has induced him to apply for its removal. The tumor presents all the external characteristics of that variety of fatty

tumor designated Lipoma Diffusum; it is lobulated, freely movable, gives no pain upon handling, feels soft and slightly elastic to the touch, and has no well defined edges, but rises gradually from the surrounding tissue. The causes of fatty tumors are not known: they are frequently congenital and when occurring in adults can seldom be traced as the result of external injury. They depend upon an unnatural accumulation of fat in the enlarged fat cells, and are most frequently found upon the back and neck, presenting two varieties; those having a broad base, as in the case before you, and those attached by a neck or peduncle and generally of an oblong shape. Fatty tumors are generally seated in the superficial fascia; sometimes, however, they occupy the deeper areolar tissues, developing themselves under muscles and in other situations which render them more difficult of recognition. As an example of this, there was during the present winter a child between three and four years old presented at the clinic, with a very large congenital tumor, occupying the scrotum and extending up the chord and through the external abdominal ring, presenting very much the appearance of a large scrotal hernia. This, Dr. Pancoast observed, was in all probability, a local accumulation of fat, which some of the older surgeons have called, though improperly, adipose hernia. Upon removal, the tumor was found to be adipose in its character, having its origin from the adipose and areolar tissues of the spermatic cord within the inguinal canal.

When fatty tumors are small, their absorption sometimes, though rarely, may be effected by friction and iodine applications and pressure; the knife, however, supplies us with the only sure method of removal. The operation is seldom bloody or dangerous, but may be rendered so from the great size of the tumor, or its intimate relation with important parts, or the too free use of the knife. The incision through the integuments should be free, the cyst, when they are provided with one, fairly opened, and the tumor dexterously worked out with the forceps and the handle of the knife, the strong adhesions alone being divided with the edge. In the present case, the tumor was grasped about its middle, and raised from the tissues beneath; a curved bistoury was then plunged through its base, and the tumor and integument divided at one cut. Each half of the tumor was

turned out from the healthy tissue enveloping it, and two small vessels tied. When all oozing had ceased, the wound was closed with stitches and adhesive plaster. The dressing consisted of lint spread with simple cerate, and a compress and roller to keep the surfaces of the wound in close apposition. The arm was put in a sling to keep the shoulders at rest.

Case 4th. Cancer of Breast.

The patient thus gives the history of the case. Sixteen years ago, her attention was directed to the left breast, by the appearance of a small moveable tumor, in the substance of the gland about an inch external to the nipple. As the disease advanced, the tissue surrounding the areola became indurated, and the nipple commenced receding, becoming thick and short and causing the skin by which it was covered to arrange itself in circular folds like a turban. At the expiration of six years, the nipple had entirely disappeared; the indurations embraced a more extensive surface, and the gland was subject to occasional attacks of pain.

The breast maintained this condition unaltered until the beginning of the past year; since then the paroxysms of pain have been more frequent, and lancinating; not being confined to the breast, but extending into the axilla and through to the back.

Upon examination, the integuments were found unbroken, although somewhat adherent to the hardened gland beneath; the nipple was entirely inverted, its site presenting a deep depression with an almost cartilaginous edge. The axillary glands were not sensibly affected. There was a constant feeling of uneasiness in the breast, which shortly after handling became converted into excruciating pain.

The removal of the breast was decided to be necessary. For this purpose the patient was placed in a chair, the arm held at right-angles from the body, and the skin made tense by an assistant. The surgeon sitting in front made an incision commencing at the anterior margin of the axilla, and carrying it below the nipple to the inner inferior boundary of the gland, cutting through the integument and superficial fascia. The second incision extended between the same points, being carried above the nipple. The gland was then dissected out, cutting from

below upwards, and removed, with a portion of the pectoralis major muscle, to which it had become attached. The vessels were tied, and the wound left exposed to the air until oozing had ceased. The edges were then drawn together and retained by suture and adhesive plaster. The dressing consisted of lint spread with simple cerate, a compress and breast bandage drawn firmly over the wound. After the operation, she took a sedative mixture to prevent excessive febrile reaction.

Case 5th. Prolapsus Iridis.

Mary Ann Wiley, æt. 11, a fleshy child of strumous habit, has for some time been laboring under an attack of scrofulous corneitis. While playing with a fork she struck the cornea of the right eye with one of the prongs. The prong penetrated it at a distance of two lines from its junction with the sclerotic. A portion of the aqueous humour escaped, and subsequently the iris protruded to the degree designated myocephalon.

Professor Pancoast first endeavored to reduce the protrusion with a probe, and by gentle friction on the ball, but finding this impracticable, he snipped it off with a pair of scissors, and permitted the iris to retract. The child was put under the following treatment:

℞.	Hydg. chld. Mit.	gr. ⅛
	Pulv. opii	⅛
	Ext. Belladonnæ	⅛

To be taken twice daily until all the pain has ceased or the gums are touched. One-half a drachm of a mixture of equal parts of extract bellad. and mercurial ointment to be rubbed night and morning round the orbit. Both eyes to be covered with a soft compress and bandage, for the purpose of excluding the light, and keeping the lids at rest. The prognosis, after a puncture of the cornea with a blunt instrument, as in this case, especially if the iris or ciliary body be touched, is, in a majority of instances, unfavorable, so far as regards the preservation of sight. The loss of vision may arise from the inflammation of the lining membrane of the aqueous chamber and the iris, by which the pupil becomes permanently closed, or the iris fastened by a deposit of lymph, to the inner surface of the cornea (*synecha anterior*) or to the capsule of the lens, (*synecha posterior;*) or if the injury of

these parts, be subdued by the treatment, blindness may follow in consequence of the lens, or its capsule, becoming opaque a few days subsequent to the accident. In either of these cases relief, should it become necessary in consequence of an accident to the other eye, may be obtained by a surgical operation, the formation of an artificial pupil, or the operation for cataract. But if the ciliary processes and choroid tunic suffer, another train of symptoms ensue, more especially to be dreaded, as it is very commonly followed not only by permanent loss of vision, but by great enlargement and deformity of the eye-ball. The inflammation of these vascular structures is accompanied with great pain and distension of the ball, and a profuse secretion of the aqueous humor. Finally the sclerotic coat yields to the distension, and lets the swollen veins of the ciliary processes, which have become large and varicose, rise up in the form of dark blue tumors round the base of the cornea. This becomes a hideous deformity, and the eye protrudes so as to form a case of exophthalmus. If the tumors be tapped to reduce the swelling, or a spontaneous diminution of the ball takes place subsequently, the ball is liable to shrink below its natural dimensions and become atrophied. The lecturer then enforced strongly upon the class, the importance of making a guarded prognosis, after wounds made through the front of the eye with blunt instruments, and endeavoring to check as speedily as possible by an antiphlogistic course of treatment, and by the use mercury, opium, and belladonna, the traumatic inflammation which may lead to such deplorable results. In the present case, he observed, in consequence of its complication with scrofulous corneitis, we may be compelled, in a day or two, to modify the plan of treatment by applying lunar caustic in substance to the corneal wound, or in solution to the conjunctiva, and giving quinia internally.

Note.—The results in the above cases have been most satisfactory. In the first case scarce any sign indicative of the previous existence of a Pterygium can be detected. The incisions in cases 3 and 4 healed rapidly. Both patients were discharged in three weeks, to all appearance cured. In case 5th, inflammation was kept in abeyance; the wound has healed and the eye is perfect, with the exception of slight cloudiness of the cornea.

BIBLIOGRAPHICAL NOTICES.

Report of a General Plan for the promotion of Public and Personal Health, devised, prepared and recommended by the Commissioners appointed under a resolve of the Legislature of Massachusetts, relating to a Sanitary Survey of the State. Presented April 25th, 1850. Boston, 1850. For sale by Lindsay & Blakiston, Philadelphia.

An English reviewer, alluding to the great number of works on hygiene, has observed, that "sanitary publications are now 'as plenty as blackberries.'" While this quaint remark may be apposite to the science of health abroad, it has neither force nor meaning on this side the Atlantic.

On the Continent, especially in France and the German and Prussian States, sanitary and medical police are under the control of government, and have been applied extensively to society. In England, within the last five and twenty years, sanitary improvement has become a popular question. It is one of the great questions of the day. Men of science, physicians, philanthropists, and members of parliament, are fully aroused to a sense of its importance, and are lending both their public and private influence to favor its advancement. Health associations have been organized, and the members are urging their claims upon the people with a zeal well becoming the intrinsic merit of the sanitary question.

With us, however, the case is widely different; sanitary publications being rare. It is only of late years, that the subject has created any interest whatever. Here and there, beyond the pale of the medical profession, may be found a solitary advocate for the science of Public Health; but, with the masses, the whole question is almost, if not altogether void of interest. With the medical profession at large, we might also say with truth, it is an "unexplored region of medical inquiry," notwithstanding it embodies principles and facts, intimately interwoven with the preservation and invigoration of human life, as well as the removal of many of the productive causes of disease and death.

By our public authorities, the laws of health and life, of happiness and usefulness, have been shamefully neglected; nor will the well-timed animadversion of Dr. J. Curtis on the acts of the Legislature of Massachusetts, in his report on Public Hygiene, read before the American Medical Association, at its sitting in May 1849, apply with less force to the government of this and every other state in the confederacy:—"We have legislated, *usque ad nauseam*, on almost everything but that which concerns us most, namely, the surest sources of health and life, and consequent happiness and prosperity. By legislation, we have protected the beasts of the field, the fowls of the air, and the fish of the sea; by legislation, we have encouraged the arts and sciences, except those which would most directly enable us to live long, useful and happy; by legislation we have granted privileges to the manufacturer, developed the resources of the agriculturist * * * * * * * all of which, is most praiseworthy; but we have neglected to use the means, for securing attainable longevity and exalted happiness, as well as some of the most prolific sources of state wealth." There is more truth than romance in this expressive extract, and it is deeply to be lamented, that the study of life-knowledge, one of the most sublime subjects that can engage the human intellect, should be so little regarded by the wise and the good.

We may congratulate ourselves, however, that a brighter day is dawning upon us, in this department of medical science. Recently, sanitary reform has been the subject of scientific investigation in Massachusetts, and several valuable tracts have issued from the press, urging the claims of Hygiene, and calculated to exert a salutary influence. In our own state, the College of Physicians has been earnestly engaged in prosecuting the science, and during the last year, a most interesting and elaborate report from the pen of Dr. John Bell, Chairman of the Standing Committee on Public Hygiene, has been published in the summary of its transactions. The public is indebted, however, for the first organized movement, on an extensive scale in this country, in behalf of sanitary reform, to the American Medical Association. At the first session of this learned body in 1848, a communication was laid before it, from the Medical Department of the National Institute at Washington, directing its attention to

the science of Hygiene. A committee of twelve was appointed to report on the subject, and at the meeting the following year, most valuable, and with us "new contributions to science" were presented, embodying a mass of information intimately connected with the causes of disease and death, thus opening a vast field for medical research never before occupied to any extent by the profession in this country, and laying the foundation for further and more enlarged prosecution. Among the states, Massachusetts has been the first to move in this department of medical literature; nor do we require any better evidence of the interest that the authorities of the "old Bay State" have felt in sanitary reform, than the publication of the admirable work, the title of which stands at the head of this article.

The suggestion for a sanitary survey of the state of Massachusetts originated with their medical society and the American Statistical Association. The legislature, in compliance with their petition, authorized the Governor and council "to appoint three persons to be commissioners, to prepare and report to the next General Court, a plan for a sanitary survey of the state, embracing a statement of such facts and suggestions, as they may think proper to illustrate the subject." The Commissioners appointed, were Lemuel Shattuck, Esq., of Boston, Nathaniel P. Banks, Jr., Esq., of Waltham, and Dr. Jehiel Abbott, of Westfield.

From the well known reputation of the first-named gentleman, as an eminent statist, and his perfect familiarity with the laws of public health and their practical operation, although not a physician, the whole preparation of the work was committed to his hands, and we are informed, that all its plans and features, together with the accompanying bill for legislative enactment, are the result of his undivided labor. Our thanks are certainly due to Mr. Shattuck, for the very able and complete manner in which he has managed to throw together such an amount of sanitary information as is contained in this volume.

The book opens with an exposition of what is intended by a sanitary survey of the state, to wit:—"an examination or survey of the different parts of the Commonwealth,—its counties, its towns, and its localities,—to ascertain the causes which favorably or unfavorably affect the health of its inhabitants." Then

follows an interesting account of the sanitary movement, both abroad and at home, beginning with the earliest records of scripture history, when, in the garden of Eden, the Supreme Lawgiver, pronounced the first sanitary law, "in the day that thou eatest thereof, thou shalt surely die,"—and bringing it down through succeeding ages, to the present time. The research and labor, necessary for gathering the materials to be found in this department of Mr. Shattuck's work, are fresh evidences of his untiring zeal and industry, in the cause of public health.

Our space, will not allow of an analysis of this succinct history of Hygiene, which has been derived from various authentic documents, and it is, perhaps, the less necessary, as we feel assured, that those who take a lively interest in the science of health, as well as those who are seeking information of the progress and usefulness of sanitary reform, will desire to obtain for themselves a copy of the work. To be properly appreciated in all its important bearings, this richly stored volume must be read entire.

The statistical tables, compiled from the Registration reports of Massachusetts, and drawn up with great accuracy, convey much valuable information, and exhibit the results of certain etiological influences, connected with locality, climate, pursuits and habits, both moral and physical, on human health and longevity. Among other results exhibited by these statistics, is, that the vital energies of man are decreasing, "and that the average duration of life is not as great now as it was forty or fifty years ago." This startling fact, has been confirmed by recent investigations in England, and our author believes, that it must be attributed to the effects of imperfect sanitary laws, and hence, if there is an improvement in these laws, there will be a corresponding improvement in the condition of human health and longevity.

Vital statistics carry with them, some of the most important facts and phenomena connected with the prosperity and healthy condition of a city or state. Could they be gathered in a uniform manner, throughout our entire country, and controlled by legislative enactment, as has been proposed by the American Medical Association, there is no estimating the happy results, in

a sanitary point of view, that would be realized in a few years.

Under the third division of subjects embraced in this "Sanitary Commission," we have the outline of a "plan for a sanitary survey of the state," which, in the clear language of the author, "Consists of a series of measures, which may be rendered permanent if desired, presented in the form of separate recommendations. They are divided into two classes, and are to be regulated and controlled by agencies which are proposed to be established; one by the legislative authority of the state, and the municipal authorities of towns and cities, and the other, by social organization and personal action."

Under the first division, the author includes an entire revision of the Health Laws, and the establishment of a general Board of Health for the state, and subordinate or local boards; "a census; a registration of births, marriages and deaths; atmospheric observations; causes of disease and death; laying out of new towns; regulation of public buildings; manufactories and private dwellings; over crowded lodging houses and cellar dwellings; public squares and ornamental trees; mill-ponds and stagnant water; house to house visitation; observations on sickness in general, and in schools; vaccination; consumption; nuisances; evils of intemperance; inquests; insane and idiots; interments; emigrant ships and steamers; quarantine and sanitary evils of emigration, &c."

Under the second division, embracing regulations which may be adopted without the aid of legislative enactment—are, "sanitary associations; tenements for the laboring classes; public baths and wash-houses; refuse of towns; abatement of smoke nuisance; physician's and apothecaries' prescriptions; adulterated food and drugs; education of nurses; education in sanitary science; physician's records of cases; clergymen interested in public health; sanitary observations in families and personal sanitary examinations."

The report closes with many well-ordered and intelligent "reasons for approving the plan recommended," together with a sensible appeal in its favor to the denizens of the state. Take it altogether, this report is a valuable acquisition to our medical literature, and while it embraces a very magnificent and compre-

hensive scale of operations, we are not surprised that the author should express some doubt of its entire sanction by those for whose special benefit it was prepared, unless it has "a careful consideration before judgement is passed upon it, and when so considered, we have great confidence that we shall have the approval of all candid minds."

Nor can we believe it to be entirely practicable (although it may have, as doubtless it will, the approval of every intelligent and candid mind,) to cultivate at once, the immense fields of sanitary improvement, contemplated in the report. We apprehend, too, that there are many difficulties to grapple with, even in Massachusetts, where the public mind is really in advance of other states on this subject, before the recommendations of the commission, involving as they do, so many features and plans entirely new, can be complied with. But we would offer no discouragement; our principle is, "expect great things, attempt great things," and though the entire classes for survey named in the plan, should never be completed, enough will no doubt be accomplished to work important changes and results in the etiological character and prevention of disease, and in the moral and physical condition of the human race.

Accompanying this report, is the "Bill drawn by the Commission and recommended to the Legislature for enactment." The main features in this bill, consist in "the establishment of a Central General Board of Health or the whole state, and a local Board of Health for each city and town in the state; each to be composed of competent men, who are to have the general superintendence of all matters relating to the public health, within their respective jurisdictions." Among other requirements embraced within the duties of the general board, they are to "advise the state as to the location and erection of public buildings, and as to the sanitary regulations of public institutions," they are to prepare an annual report for the legislature, embracing "such remarks, as their observation, experience and reflection may suggest, as to the sanitary condition of the state, its institutions and inhabitants; and recommend the adoption of such useful sanitary measures as in their judgement may lead to improvement." They are also authorized to expend fifty dollars annually for books suitable for a sanitary library. They are to "superintend each

enumeration of the inhabitants of the state," besides many other important and necessary duties, entirely new with boards of health as at present organized.

The powers to be conferred upon the general Board of Health and on Local Boards, by the enactment of the bill proposed by the Commission, are ample in their nature and design. The bill has been drawn up with great care, after much reflection and investigation, embracing every subject matter involved in the great sanitary question. Should it be passed by the General Court of Massachusetts so as to become a law, in its present shape, we have no hesitation in promising that the health, wealth, and prosperity of the state will be eminently improved. Besides the conferring of such blessings on the state, the adoption of the recommendations for a sanitary survey and the passage of the Health act appended thereto, would give an impetus to the authorities of other states to "go and do likewise."

Thus would the noble example of "the forefathers land" be imitated, her influence be felt the wide country over, and the adoption and administration of wise sanitary laws prove a benefit and a blessing for generations to come. God speed the day when the ignorant on this vital question may be instructed, when life-knowledge, or the art of preserving life, by invigorating health and removing the causes of disease, shall take its place side by side, with the progressive sciences, thus meeting the demands of the spirit of the age.

Attached to the report is a copious appendix, illustrating, by a variety of well written articles, many of which, however, have appeared in print elsewhere, the principles and practice of sanitary reform as inculcated throughout the book.

In concluding this cursory notice of Mr. Shattuck's highly interesting work, it only remains for us to express the pleasure we have derived from its perusal. We heartily commend it to the careful reading of every physician, philanthropist, political economist, statistician and statesman, as embracing rich materials out of which may be formed correct principles of public and private Hygiene. Our sincere desire is, that it may be widely circulated, and contribute largely to the further developement of an already too much neglected science; one that cannot be overrated, and that is essential both to the health and happiness of the million.

W. J.

The Anatomy, Physiology and Pathology of the Eye. By HENRY HOWARD, M. R. C. L. S., Surgeon to the Montreal Eye and Ear Istitution.

In the midst of the abundance of medical literature, with which the press is teeming, it is truly refreshing to meet with a work, which comes honestly up to its avowed purpose, in which the author turns neither to the right nor to the left to make popular capital, and which, though evidently the result of much study and observation, is uncontaminated by the slightest tinge of parade or pedantry.

Dr. Henry Howard, as Surgeon to the Eye and Ear Institution, at Montreal, has enjoyed the advantage of a wide field for practice, an advantage of which he seems to be in every way worthy, for, as a result, he has given us an excellent book. We regret that want of time and space prevents our entering into its minutiæ, but assure our readers, that a perusal will amply repay their trouble.

The book commences with the anatomy of the eye, bones, muscles, nerves, membranes, &c., with clear and concise descriptions, correct, and withal sufficiently minute for every purpose. The physiology of the nerves, muscles, &c., follows, in which science the author appears to be fully up with the best physiologists of the day. He differs with some of them on a few minute points, and supports his opinions by facts taken from close observation, with considerable skill and judgment, but as time alone can settle many of these points, we shall offer no opinion on them.

The pathology of the eye comes next; the causes, symptoms and treatment of the different morbid conditions of the organ are described with great accuracy and clearness. The chapter on simple, severe and purulent ophthalmia, we call attention to, as being particularly worthy of careful perusal. The section on periosteal disease of the orbit, is good, and there are some interesting remarks on inflammation of the tunica vaginalis oculi.

In the course of the volume, almost all the approved operations on the eye are faithfully described, but the organ has been

sliced and cut in such variety of modes, that originality of carving is next to impossible.

An instrument invented by the author, for making the section of the cornea in the operation of extraction is described; he says that it possesses the great advantage of dividing the cornea without endangering the iris, in case of its falling forwards; it likewise obviates the necessity of making a counter-puncture, which all surgeons admit to be the most difficult part of the operation. Those interested in the subject, will do well to read and judge for themselves; our limits will not permit us to make explanatory quotations, nor, to speak candidly, do we place much reliance on such toys, for we have always thought with Liston, that a quick eye, steady hand, and a sharp knife, are more to be relied on than all the grooves, slides, springs, and guillotines that have ever been invented.

The book is well gotten up, and handsomely printed. We advise all who are interested in the subjects of which it treats to procure it; the practitioner may often refer to it with advantage, and the student cannot be better employed than in reading it attentively.

On the Use and Abuse of Alcoholic Liquors, in Health and Disease. Prize Essay. By WILLIAM B. CARPENTER, M. D., F. R. S., F. G. S., &c. &c. Philadelphia, Lea & Blanchard. pp. 204.

The important nature of the subject discussed in this Essay, and the distinguished reputation of its author, are of themselves sufficient to secure for it a large share of attention, both in and out of the medical profession. Dr. Carpenter approaches the subject as a man of science, and not as an advocate anxious to establish preconceived views. That he has fully succeeded in his effort to support this character, we are not prepared to affirm, but if his bias as a moralist has induced him to accept testimony which rigid science would reject, a careful perusal of this essay has convinced us that it is worthy an examination by the best informed on the subjects it relates to.

In the preface to the work, the reader is requested "to keep the following issues in view, as those to which he [the author,] is desirous of leading him."

"In the *first* place. That, from a scientific examination of the *modus operandi* of Alcohol upon the Human body, when taken in a *poisonous* dose, or to such an extent as to produce Intoxication, we may fairly draw inferences with regard to the specific effects which it is likely to produce, when repeatedly taken in excess, but not immediately to a fatal amount."

"*Secondly.* That the consequences of the *excessive* use of Alcoholic liquors, as proved by the experience of the Medical Profession, and universally admitted by medical writers, being precisely such as the study of its effects in poisonous and immediately fatal doses would lead us to anticipate, we are further justified in expecting that the habitual use of smaller quantities of these liquors, if sufficiently prolonged, will ultimately be attended, in a large proportion of cases, with consequences prejudicial to the human system,—the morbid actions thus engendered being likely rather to be chronic, than acute, in their character.

"*Thirdly.* That as such morbid actions are actually found to be among the most common disorders of persons advanced in life, who have been in the habit of taking a 'moderate' allowance of alcoholic liquors, there is very strong ground for regarding them as in great degree dependant upon the asserted cause; although the long postponement of their effects may render it impossible to *demonstrate* the existence of such a connection.

"*Fourthly.* That the preceding conclusion is fully borne out by the proved results of the 'moderate' use of Alcoholic liquors, in producing a marked liability to the acute forms of similar diseases in hot climates, where their action is accelerated by other conditions; and also by the analogous facts now universally admitted, in regard to the remotely injurious effects of slight excess in diet, imperfect aeration of the blood, insufficient repose, and other like violations of the Laws of Health, when habitually practiced through a long period of time.

"*Fifthly.* That the capacity of the healthy Human system to sustain as much bodily or mental labor as it can be legitimately called upon to perform, and its power of resisting the extremes of Heat and Cold, as well as other depressing agencies, are not augmented by the use of Alcoholic liquors; but that, on the other hand, their use, under such circumstances, tends positively to the impairment of that capacity.

"*Sixthly.* That, where there is a deficiency of power, on the part of the system, to carry on its normal actions with the energy and regularity which constitute health, such power can rarely be imparted by the habitual use of Alcoholic liquors; its deficiency being generally consequent upon some habitual departure from the laws of health, for which the use of Alcoholic liquors cannot compensate; and the employment of such liquors, although with the temporary effect of palliating the disorder, having not merely a remotely injurious effect *per se*, but also tending to mask the action of other morbific causes by rendering the system more tolerant of them.

"*Seventhly.* That, consequently, it is the duty of the Medical Practitioner to discourage as much as possible the *habitual* use of Alcoholic liquors, in however 'moderate' a quantity, by all persons in ordinary

health; and to seek to remedy those slight departures from health which result from the 'wear and tear' of active life, by the means which shall most directly remove or antagonize their causes, instead of by such as simply palliate their effects.

"*Eighthly.* That, whilst the habitual use of Alcoholic liquors, even in the most 'moderate' amount, is likely (except in a few rare instances) to be rather injurious than beneficial, great benefit may be derived, in the treatment of Disease, from the *medicinal* use of Alcohol in appropriate cases; but that the same care should be employed in the discriminating selection of those cases, as would be taken by the conscientious practitioner in regard to the administration of any other powerful remedy which is poisonous in large doses."

If the manner in which Dr. Carpenter argues these "issues" does not amount to an actual demonstration of their truth, he will, we think, cause the conscientious practitioner to hesitate before, by his advice or otherwise, he encourages a violation of the principles laid down in them. Independently of the question of morality which the subject involves, Dr. Carpenter's work possesses much interest for the Phrenologist, the Pathologist, and the general reader.

Amongst the various positions considered by our author, that which refers to the "general effect of the excessive use of alcoholic liquors on the duration of life," is an important one to the medical practitioner—and especially to those connected with life assurance institutions. Dr. C. says:

"At the age of 40 years, the annual rate of mortality among the whole population of England, is about 13 per 1000: whilst among the lives insured in Life Offices, it is about 11 per 1000; and in those in Friendly Societies, is about 10 per 1000. Now the average mortality of *all ages* between 15 and 70 years, is about 20 per 1000; whereas in the Temperance Provident Institution, after an experience of eight years, and with several lives above 70 years of age, the average mortality has has been only 6 per 1000, up to the present season, in which it has undergone a slight increase from the Cholera epidemic."

The division which refers to the "*supposed use of alcohol in sustaining the vital powers*" is especially interesting, the author having drawn together a copious collection of illustrations from actual experience to prove his positions.

He considers this question under the heads; 1st, Of severe *bodily exertion*, 2d, of severe *mental* exertion; 3d, of extreme *cold*; 4th, of extreme *heat*; 5th, of *morbific agencies.*

And under all these heads he gives weighty reasons for be-

lieving that alcohol in any quantity, as a rule, exerts pernicious, rather than beneficial influences. Numerous examples under a variety of circumstances, are brought to prove, that when moderate spirit drinkers and total abstinence men are brought together under exposure or severe bodily labor, the results are uniformly in favor of the latter.

Under the head of *severe mental exertion*, after admitting that a particular kind of genius may occasionally be excited to brilliancy by the stimulus of alcohol, Dr. C. gives the following result of his own experience:

"We do not usually find that the men most distinguished for that combination of intellectual powers which is known as *talent*, are disposed to make such use of Alcoholic stimulants for the purpose of augmenting their mental powers; for that spontaneous activity of the mind itself, which it is the tendency of alcohol to excite, is not favorable to the exercise of the observing and purely reasoning faculties, or to the steady devotement of concentrated attention to any subject which it is desired to investigate profoundly. Of this we have a remarkable illustration in the habits of practiced gamblers; who, when about to engage in contests requiring the keenest observation and the most sagacious calculations, and involving an important stake, always 'keep themselves cool,' either by entire abstinence from fermented liquors, or by the use of those of the weakest kind in very small quantities. And we find that the greatest part of that intellectual labor which has most extended the domain of human knowledge, has been performed by men of remarkable sobriety of habit, many of them having been constant water-drinkers. Under this last category, it is said, may be ranked Demosthenes and Haller; Dr. Johnston, in the latter part of his life, took nothing stronger than tea, while Voltaire and Fontenelle used coffee; and Newton and Hobbes were accustomed to solace, not to excite, themselves by the fumes of tobacco. In regard to LOCKE, whose long life was devoted to constant intellectual labor, and who appears, independently of his eminence in his special objects of pursuit, to have been one of the best informed men of his time, the following very explicit and remarkable testimony is borne by one who knew him well. 'His diet was the same as other people's, except that he usually drank nothing but water; and he thought that his abstinence in this respect had preserved his life so long, although his constitution was so weak.'

"Having for several years past, been himself performing an amount of steady mental labor, which to most persons would appear excessive, the writer may be allowed to refer to his own experience, which is altogether in favor of Total Abstinence from alcoholic liquors, as a means of sustaining the power of performing it. Having been brought up as a water-drinker, he never accustomed himself to the habitual use of alcoholic liquors, scarcely ever tasting them, except when occasionally led to do so by social influences, or when he believed that a small amount of stimu-

us would improve the 'tone' of his system, which is liable to a peculiar relaxation in certain states of the atmosphere. On determining, about four years since, to give up the occasional use of wine, &c., as a social indulgence, he still held himself free to employ it when he might think it likely to increase the general powers of his system; and for some time he continued to have occasional recourse to alcoholic stimulants (never exceeding a single glass of wine, or half a tumbler of bitter ale,) when he felt himself suffering under the peculiar depression just referred to. He gradually, however, found reason to doubt the utility of the remedy, and has for the last two years entirely given it up. During these two years, he has gone through a larger amount of mental labor than he ever did before in the same period of time; and he does not hesitate to say that he has performed it with more ease to himself than on his former system; and that he has been more free than ever from those states of depression of mental energy which he was accustomed to regard as indicating the need of a temporary support to antagonize the depressing cause. In fact, he now finds that, when these do occur, the use of alcoholic stimulants (taken even in small amount) is decidedly injurious to him; diminishing rather than increasing his power of mental exertion at the time, and leaving him still less disposed for it after their effect has gone off. He attributes this change to his entire disuse of alcoholic liquors under all other circumstances; and he cannot but believe that the results which he now experiences, and which have led him to relinquish these stimulants altogether, are the *natural* effect of them upon the healthy system; and that the benefit which some persons consider themselves as deriving from their use, arises from their simply removing *for a time* the depression which results (at a long interval, it may be) from their *previous* employment."

In conclusion, we will again repeat our anxiety to bring this little volume under the notice of the profession.

Ether and Chloroform, their employment in Surgery, Dentistry, Midwifery, Therapeutics, &c. By J. F. B. Flagg, M. D., Surgeon Dentist, &c. Philadelphia, Lindsay & Blakiston, 1851.

The little work of Dr. Flagg presents an excellent resumé of the history of ether and chloroform, together with their physiological, psychcological and therapeutical effects. We commend it to all who may desire information on these various points, or as to the best and safest modes of administering it. It comes from one who has had great and extended experience in its use.

THE MEDICAL EXAMINER.

PHILADELPHIA, APRIL, 1851.

REGISTRATION OF BIRTHS.

Our attention has recently been drawn to the fact, that the Board of Health of this City, by a resolution, have notified the practitioners of midwifery within their jurisdiction to furnish complete returns of the number of births, during the years 1848, '49, and '50. It is deeply to be regretted, that there should have occurred any neglect in collecting these statistics for the last three years, as it shows an apparent dereliction of duty somewhere. It is the more to be lamented, as there is at all times a serious difficulty in procuring such records, and, since a register of births occurring in a large city from year to year, constitute a prominent feature in the tables of vital statistics. In consequence of this hiatus, the Board of Health have failed to complete and publish their annual statement of Births and Deaths for the years above named.

Another source of regret is, that when the missing statistics shall be collected, and especially those embracing the births for 1849 and '50, during and following the prevalence of Epidemic Cholera, they will be, at the best, so imperfect, that only very meagre results can be obtained from them, more particularly as to the effect of the epidemic, and its depressing influences upon the vital energies, in their relation to the reproductive organs.

We have ever hesitated to believe that the fault in obtaining a correct and connected statement of births, lay at the doors of the practitioners, or, that they have not viewed the science of vital statistics of sufficient import to demand their careful study and appreciation, or that they can fail to remember, that these statistics have for their object, the discovery of those laws of the economy of our nature, by which births, marriages, disease and death, under every variety of circumstances, are regulated.

But we apprehend, from the action of the Board, that the failure must have been attributed, in some degree at least, to the delinquency of those whom we would fain defend—or, why the necessity for leaving at the office of each and every one a special notice, together with a copy of

the act of assembly for 1819, providing for the registering of births, which we believe has been done?

To our knowledge, there are many in our city who have never registered their names at the Health Office as the law requires, and others who have complained bitterly that the Board of Health require them to furnish their statistics. But why complain? The Board are doing no more than carrying out the designs of a law enacted by the Legislature, at the instance of members of our own profession, and if medical men will not appreciate the subject, and interest themselves in furnishing these statistics, who will do it? We are far from believing that this apparent indifference and dissatisfaction prevail to any extent even among mere routine practitioners, much less with those who, by a studious devotion to their profession, cultivate medicine as a science of the highest order.

We cannot but hope, therefore, that the practitioners of midwifery in this city, will afford every facility within their power, for the collection of the deficient registration of births under their care, for the last three years.

The advantages resulting to the profession and to the community from a well digested and complete system of registration, require no repetition here, inasmuch as the matter has been recently laid before them, and the general public, in a memorial addressed to our State Legislature. The subject in all its important details has also been fully discussed and elucidated, in the councils of our American Medical Association, and by an unanimous vote of that body, an address has been prepared and forwarded to the several state governments, urging upon them, the adoption of measures for carrying out a general registration of births, marriages and deaths.

The present system of registration in Pennsylvania, limited as it is to this city, and full of imperfections, shows interesting results in the detailed investigations furnished at different periods by Dr. G. Emerson, in his tabular statistics; but, if this department of Hygiene was placed on a broader and firmer basis, sanctioned and enforced by legislative enactments, embracing the whole state, we have reason to believe, that, from the accumulation of statistical facts and the deductions made therefrom, that results would accrue, not only for the promotion of the health and longevity of the masses, but for the improvement of the moral and social condition of society, and the well being of the whole Commonwealth.

We have been requested to call the attention of our readers to the advertisment of a physician desirous of disposing of his practice, which will be found in this number; we have been assured, by a reliable person, that it yields two thousand dollars a year.

MEDICAL NEWS.

Charleston, 10th March, 1851

Editors of the Medical Examiner.

Gentlemen,—You will greatly oblige us by correcting, in your April issue, an error that crept into the notice of the time of meeting of the American Medical Association, contained in the January Number of the Charleston Medical Journal and Review. The *second* is, by mistake, put for the *first* Tuesday in May: the latter being the day prescribed by the Constitution for the meeting of that Board.

We are very respectfully your obedient servants,

D. J. CAIN,
F. P. PORCHER.

THE PHILADELPHIA ASSOCIATION FOR MEDICAL INSTRUCTION, will commence its regular course of lectures for the summer, on Monday, April 7th. The general introductory will be delivered by Dr. West.

GRADUATES IN MEDICINE, 1851.—Jefferson Medical College, 227. N. Y. University, 119. Maryland University, 45. Ohio Medical College, 59. University of Missouri, 83. Pennsylvania Medical College 36. Louisiana Medical College, 37.

DR. ANDREW SMITH has been appointed to succeed Sir James McGrigor, as the head of the medical department of the British army.

MISS MARTINEAU,—whose advocacy of homœopathy, mesmerism, and other kindred follies, has long been so notorious, now appears as the champion of the grossest and most undisguised materialism. In a late publication styled 'Letters on the laws of man's nature and development, by Henry George Atkinson F. G. S., and Harriet Martineau,' the lady's adoption of all the worn out trash of atheism is formally announced, as if to show the world how far the extremes of infidelity and credulity are compatible. An enthusiastic believer in homœopathy and the most

ridiculous excesses of mesmerism, she entirely rejects the notion of a Great First Cause, a Providential Guidance, and, in short, of a spiritual life, and of all human responsibility and accountability. This is another proof, as has been well observed, that "the feebleness of mind which leads to the rejection of great truths, is precisely that which tends to the reception of as great errors."

POISONING BY MISTAKE.—One of those unfortunate errors which occasionally compromise, not only the reputation of the practitioner, but the life of the patient, has recently been the chief subject of conversation in the medical circles of Paris.

The head surgeon to one of the French lunatic asylums administered ten scruples instead of ten drops, of laudanum in lavement, to a patient. The patient died thirty-six hours afterwards, with doubtful symptoms. The error of prescription could not be denied, and the surgeon was therefore brought to trial.

Five of the most celebrated physicians in Paris declared, both as medical men and legal jurists, that it was not clear to them that death had arisen from poisoning with laudanum. On the other side, two professors at the *Veterinary* School of Alfort, unhesitatingly attributed the fatal effect to the narcotic poison. The surgeon was found guilty of involuncary homicide, and condemned to fifteen days' imprisonment. The jury, perhaps came to a correct conclusion; but it seems strange that their opinion should have been formed on evidence derived from the experience of men who deal exclusively in animals.

But opinions are formed in France on very slender grounds, and jurymen, if they go astray, may cite the example of ministers. In a public discussion the other day, at the National Assembly, M. Waisse, the Home Minister, in order to excuse the Government for its neglect of the poor, affirmed that of 21,000 children born in Manchester, only 300 attain the age of five years. In other words, the mortality of children in Manchester, up to the age of five years, is 98½ per cent. Surely this must be a grave and gross error. Even if the fact were true, it affords little consolation for the analogous one, "that in a certain part of Lille, only four children out of one hundred attain the age of five years."

The concours for the Chair of Surgery at the Faculty of Medicine still continues, and many of the exercises have been conducted in a brilliant manner. M. Robert, of the Hôtel-Dieu, and Professor Buisson, of Montpelier, appear to divide the chances between them. Either would make

an excellent professor; Robert as a practical surgeon, Buisson as an accomplished teacher.—*Paris Correspondent of the London Med. Times* 22d. *Feb.* 1851.

Deaths of Distinguished Physicians.—The year 1850 has been fatal beyond all measure to medical science in France. Nearly all that remained to us illustrious in every department of the science has passed away. In chemistry Gay Lussac; in surgery, Marjorlin and Blandin; in comparative anatomy, de Blainville; in medicine, Fouquier, Royer-Collard, Capuron, Prus, and a host of others. To this long catalogue is to be added the name of M. Leuret, physician to the hospital of Bicêtre. M. Leuret was one of those persons, now so rare, who pursue their career without noise or ostentation; therefore, notwithstanding the extent and variety of his knowledge, the remarkable clearness of his judgment, and his personal value, it was long before M. Leuret enjoyed that degree of public estimation to which his peculiar talents so justly entitled him. He wanted ambition, and was consequently inactive. Even his great work on the Comparative Anatomy of the Nervous System still remains unfinished.

The peculiar doctrines of M. Leuret on the moral treatment of insanity are well known. They met with obstinate opposition in France, and were the principal cause of the little public success which their professor obtained. On the other hand, M. Leuret was one of the most effective opponents of phrenology, and his profound knowledge of the comparative anatomy of the brain enabled him to overthrow many a brilliant theory, which seemed inexpugnable when applied to man alone.

Naegele, the celebrated Professor of Midwifery of Hiedelberg, and Langenbech, the no less distinguished Professor of Anatomy and Surgery at Gottingen are dead. They died on the same day; Naegele at the age of 72, Langenbech at 75. Naegele was born at Dusseldorff and studied at Strasbourg and Paris. Langenbech, at his own expense, erected and endowed at Gottingen a Surgical Hospital and Anatomical Theatre.

Delegates from the Philadelphia County Medical Society.

American Medical Association,—Drs. B. H. Coates, G. Emerson, P. B. Goddard, Ed. Hallowell, B. S. Janney, J. F. Lamb, D. P. Lajus, Samuel Lewis, R. La Roche, J. H. B. McClellan, Lewis Rodman, Francis West, T. H. Yardley.

State Medical Society,—Drs. Wm. Ashmead, Henry Bond, T. F. Betton, D. F. Condie, G. Emerson, G. Fox, J. D. Griscom, I. Hays, N.

L. Hatfield, Prof. S. Jackson, Saml. Jackson (late of Northumberland), W. Jewell, J. F. Lamb, C. D. Meigs, W. Maybury, J. H. B. McClellan, G. W. Norris, Wm. B. Page, Isaac Parrish, Lewis Rodman, Isaac Remington, M. B. Smith, G. B. Wood, F. West, J. Warrington, T. H. Yardley.

RECORD OF MEDICAL SCIENCE.

OBSTETRICS.

On the employment of Tartar Emetic to relieve Rigidity of the Cervix and os uteri, in cases of Parturition.—Dr. A. Hall, of Montreal, strongly recommends the employment of tartar emetic, to relieve rigidity of the cervix and os uteri, in parturition, and in *much larger doses* than has been advocated by writers on midwifery. Dr. Hall prescribes it in grain doses, every half hour. He has not found it necessary to exhibit the medicine in such doses more than thrice, relaxation most commonly following the exhibition of the first grain. Several cases are reported, strikingly illustrative of the value of the practice. Dr. Hall, however; admits that "cases may be met with, in which its exhibition would be decidedly improper. These exceptions to the rule will be found to occur in women of delicate habit and leucophlegmatic temperament. They are cases in which the action of the remedy, if exhibited, may proceed too far; which, unable to resist the prostrating effects of the medicine, might be followed by a collapse, to which the vital powers of the system might succumb. This is a contingency which should be sedulously kept in view; and prudence demands, therefore, some care in the selection of proper cases for its exhibition."—*Abridged from British American Medical and Physical Journal, December* 1850.

Case of Sudden Death Seven Hours after Delivery—Air found in the Heart. By Mr. Berry.—E. G., aged 22, pregnant with her first child, was taken in labor on the evening of June 16, 1830. The pains at first were slight, and continued so during the night. In the morning of the 17th she became worse, and at 2 o'clock, P. M., the pains were so strong as to induce her to send for her medical attendant, Mr. Dyer, who remained with her till seven o'clock in the evening, when she was delivered of a male child. In twenty minutes after the birth of the child, the placenta was naturally expelled, with but little loss of blood. At half-past eight o'clock she was very comfortable, and at ten o'clock was carefully put to bed. At eleven o'clock she took some gruel, and expressed herself "as feeling as comfortable as she could expect." Her husband then lay by her side. About one o'clock in the morning of

the 18th, he became alarmed by her difficult breathing, and feeling of faintness. He immediately sent for Mr. Dyer, but before he arrived, at two o'clock, she was dead. She lived seven hours after her delivery. The cause of death could not be accounted for, as there was no hemorrhage, and apparently nothing in the condition of the patient to prognosticate such a termination. A post-mortem examination was allowed, and was made early in the morning of the 20th. The body was well formed and nourished. A thick layer of fat existed in the abdominal coverings. Upon opening the abdominal cavity the uterus was seen midway between the pelvis and umbilicus; the peritoneum covering it and the intestines was healthy, but pale. The stomach contained a small quantity of fluid. Liver healthy. The kidneys presented a granulated appearance; and the urine which remained in the bladder was ascertained to be, by the application of heat, slightly albuminous. Upon cutting into the uterus, it was found empty, and the vessels where the placenta had been attached patulous. The vagina contained, at its superior part, a moderately-sized clot of blood. Within the chest both lungs were congested, and contained scattered tubercles in their lobes. The heart was the size of a male heart, and apparently distended. Upon making an incision into it, a gush of air escaped, and the organ became flaccid; no blood was found in its cavities. About one ounce of serum was observed in the pericardium. The brain was healthy in every respect. No signs of decomposition existed in any part of the body.

Olivier, in the article "Air," in the "Dictionnaire de Médecine," p. 73, when referring to Legallois' experiments on the inferior animals, in which he had found sudden death occur from air penetrating into the vena cava inferior and heart, by the uterine veins, in female pregnant animals, asks the following question:—"Is it to a cause of this kind that we ought to attribute the sudden and unexpected death in females lately delivered, and where the autopsy disclosed nothing which could account for such a catastrophe." Does the case above detailed answer the interrogation of Olivier? The labor was natural, and concluded within the ordinary period; the placenta was expelled with but little loss of blood; every thing went on well for some hours, when suddenly the respiration became obstructed, and death followed in a very short period. Upon examination, nothing could account for these symptoms but the congested state of the lungs, and the air found in the heart. The mode in which the air effected its entrance appears to me to be as follows:—The uterus, after the removal of the placenta, contained a clot of blood, with the contraction of the uterus the clot was forced into the vagina, when the uterus relaxed, air was drawn into its cavity, the clot in the vagina prevented the air from passing out of the uterus easily, and the mouth of the uterine veins being patulous, it was forced into them, and then passed into the general venous circulation. The entrance of the air was, in all probability, gradual, and, therefore, occupied some time before it reached the heart in sufficient quantity to give rise to those symptoms of obstructed respiration, which soon terminated in death. Dr. Simpson, in a communication to the late Dr. Reid on this subject, has expressed himself as follows:—"As to the

mechanism of the introduction of air in such cases, supposing that to be the cause, I think we can understand it when we remember that the interior of the uterus after delivery, especially opposite the late seat of the placenta, is studded with venous orifices, and that if the air does once become introduced into the uterine cavity, from relaxatiou of the walls of the organ, it will be liable to be forced into these orifices, and hence into the general venous circulation, provided the uterus, in again contracting, is unable to expel its contents through the os uteri."—*Prov. Med. and Surg. Journal.*

Tumour of the Rectum, containing Portions of a Fœtus, extracted from a Child six years old. By M. Bouchacourt, Head Surgeon to the Hospital of La Charité, Lyons.—Catharine Sery, a girl 5½ years of age, after having suffered from several disorders connected with the digestive organs, passed a large quantity of purulent matter from the anus. The discharge continued for seven months: the child fell away, and the excretion of fæces became more and more difficult.

About a fortnight after the first discharge of purulent matter, that is near the end of August, 1849, a long lock of auburn-colored hair was passed from the anus; it bore great resemblance to that of the little patient. About the end of March, 1850, the purulent discharge ceased, and nothing unusual was noticed until the 17th April, when some blood was passed from the anus; the child now suffered from constant tenesmus. As the efforts increased a tumor presented itself at the orifice of the anus, disappearing again when the strain ceased. The patient was now admitted into hospital, under the care of M. Bouchacourt.

On examining the rectum it was found that the tumor extended some way into the gut, adhering to the posterior wall only at its upper part. The tumor was soft at some points, hard at others, smooth and partly covered with hair. Its nature thus became manifest at once; it was resolved that we should extirpate it, and nature assisted us, for after a long walk the tumor protruded almost entirely from the rectum. A careful examination now showed that the root or pedicle of the tumor did not contain any vessels, and that no portion of the intestinal canal was connected with it. Extirpation was therefore easily effected by means of a double ligature and the scissors. A few drops of blood only escaped, and the child was well in a few days.

The tumor was an irregularly oval mass, weighing 2½ oz., covered with fine white skin, exactly like that of a new born child. On one end were some hairs, and on the other a fine down. On making a very careful examination, a transverse fissure was discovered close to one of the ends, and on a tubercle attached to the lower lip of the fissure were two teeth, a canine and a molar one. On a similar tubercle of the upper lip was an incisor tooth, placed transversely. On dividing the body of the tumor, the first object which presented itself was a round bone, imbedded in fibro-fatty matter. This bone supported a number of teeth and some capsules. Beneath this bone was another small one of irregular shape, the nature of which it was impossible to determine. It might be a rudimental rib or

vertebra. Finally the lower portion of the trunk was represented by a cartilaginous mass of the size and shape of a small nut.—*London Med. Times, 1st March,* 1851, *from Bulletin de l'Institut.*

MATERIA MEDICA AND THERAPEUTICS.

Antiseptic properties of Chloroform. By M Augend, of Constantinople.—M. Augend has communicated to the French Academy of Sciences the following experiments, which establish a marked line of demarcation between ether and chloroform, and point out in the latter a remarkable property which has hitherto escaped the attention of chemists.

If three wide-mouthed, ground stoppered bottles are taken, and into one we put a few drops of ether, into another a few drops of chloroform, and leave the third in *statu quo*; then place in each a piece of beef, secure the stoppers, and leave them during summer weather, the following phenomena are observed:—The flesh, naturally of a reddish brown color, passes et once to a vermillion-red, under the influence of the vapor of chloroform mixed with air, whilst it undergoes no change in the ether. Such are the immediate effects, but at the end of a week the results are still more distinct. The flesh preserved in the air has changed its color slightly, that which is preserved in the ether has become brown, whilst that in the chloroform has acquired the appearance of boiled meat. On opening the bottles the meat in the air has become offensively putrid, and the same thing occurs in the presence of the ether, whilst there is no change in the flesh kept in the Chloroform, apart from the sweet taste and peculiar odor of the lattter.

These antiseptic properties of chloroform have furnished interesting results to M. Augend. He has found that 1-2000th part of it suffices to preserve a mass of muscular flesh. Not less remarkable is the facility with which the vapor permeates the densest tissues. Chloroform has this advantage over creasote, that it does not coagulate the albumen; nor is it on its part decomposed by muscular fibre.

The most apparent action of the chloroform, not only on muscular substance, but also on the fleshy pericarps of fruits and seeds, is an immediate contraction of the fibre or the parenchyma, which causes the watery juices to flow out on the bottom of the vessel in which the experiment is made.

The author reports a number of trials made on different animal substances, and modified in various ways, from which it results that the antiseptic properties of chloroform may be of use to naturalists and anatomists, who wish to preserve specimens for some time. He even thinks that it might be applied to the preservation of bodies in case of homicide, where these might require to be kept for sometime for medico-legal purposes.—*Gazette Medicale,* 15th November, 1850.

SURGERY.

On the subcutaneous application of the Ligature for deep-seated Nævi. By JOHN ADAMS, ESQ., F.R.C.S.E., Surgeon to the London Hospital, and Lecturer on Anatomy in the School.—In the treatment of these cases it is of course a primary object to cure the disease without the destruction of the skin which covers it, and which, in many cases, is scarcely involved in the disease. Hence the employment of the seton, the cutting up of the tumor with the couching needle, the injection of irritating lotions, and the introduction of probes armed with nitrate of silver, &c. &c. Nay, even the actual cautery may be used with a view to induce such an amount of inflammation in the cells and blood-vessels of the tumor as shall lead to its complete obliteration.

It has suggested itself to me that a ligature might be so employed as to embrace the whole of the disease without compromising in any manner the vitality of the superjacent skin; and the following is the plan I put into operation in a recent case:—

The disease occurred in a child six months old, and was situated on the right cheek, close to the nose and just beneath the eyelid. The tumor was somewhat oval, its long axis vertical, and, although the disease was principally in the subcutaneous vessels, yet the veins of both upper and lower palpebra were somewhat varicose.

I introduced a long needle armed with a ligature, only slightly curved on the flat towards the point, and carried through the side of the tumor in its long axis, from below upwards; having drawn out the needle on the opposite side, I re-introduced it on the other side of the tumor, at a point on a level with its point of exit, and brought it out opposite the point of its first insertion. If I had now tied the ligature I should have encircled the whole of the tumor, but there would have been great puckering of the skin at the upper and lower edge, whilst the skin on either side would have been free. To obviate this inconvenience, therefore, I cut through the skin above and below, from the point of insertion to the point of exit of the needle, and having tied the ligature firmly, I endeavored to strangulate the tumor.

In this case the success was not complete, and I believe the want of success arose from my having, on the fourth day, divided the knot with a pair of scissors, and removed the ligature before the disease was effectually destroyed.

This method of procedure is founded on the assumption, that subcutaneous nævi are supplied by vessels springing from below rather than by those of the skin. This, however, is not always the case, and I am inclined to think that in the instance just related there were many vessels passing into the tumor from the skin.

I am not aware that this mode of applying the ligature has been put into practice before; it is exceedingly simple, and, as it in nowise compromises the vitality of the skin, I think it deserving of a fair trial.

In another case I certainly should allow the ligature to remain, until, by gentle and gradual traction of its ends, which should be left of about two inches in length, it could be made to cut its way through the base of

the tumor, thus completely detaching it from its subjacent connexion.—*London Med. Times.*

Calculus Removed by Dilatation of the Urethra. By R. DAVEY.—Georgiana Bingham, a little girl, aged about three years, was brought to my house, apparently in the last stage of atrophy; she had been under medical treatment for some time without any benefit; she suffered from a prolapsed state of the rectum, constant desire to make water, could scarcely get any sleep, and the right eye completely turned from straining. Suspecting stone, I sounded, and found one of considerable size; proceeded, with the assistance of my son, to remove it by dilatation; commenced with a warm hip bath, then with several bougies, and, having dilated the urethra sufficiently to introduce one of Fergusson's three-bladed dilators, grasped the stone with the forceps; but, unfortunately, it broke, therefore only a portion was brought away; the child was now very much exhausted from crying, so had her placed in bed, after I had injected the bladder with warm water. She went on well for six days, when stoppage again came on; proceeded as before, and this time brought away a much larger piece. From this period she went on well; and at the end of a fortnight gave her some preparation of iron. The child is now perfectly restored, and is getting fat, the bladder having regained its functions, and she full command of the urine. Weight of the stone removed 6 drs. 20 grs.—*London Medical Times.*

ANATOMY AND PHYSIOLOGY.

Spontaneous Generation.—M. Gros, of Heidelberg, has communicated to the Institute the substance of some curious researches relative to an animalcule which, according to the learned author, is developed spontaneously in the frog's bladder. The animalcule now alluded to has been denominated by M. Gros "*torquatina.*" It is produced by the mucous membrane of the bladder, which detaches a granule; this granule becomes the crown of the animalcule, while the neighboring vesicles become the body. To follow the development of the animalcule, it is necessary to take a small bit of the mucous membrane without injuring it, and then place it very cautiously under the microscope. Any pressure or solvent, even serum, will kill the animalcules. If these precautions be observed, the development of the animalcule may be followed. A mere unorganized granule is detached from the mucous membrane; this coalesces with other granules to form a certain portion of the animalcule; the latter then folds up its crown, fixes a number of vibratile cilia in various parts of its body, becomes oval, and constitutes an *opalina.* This latter forms a nidus in the mucosities of the intestine, deposits an egg, and the latter gives rise to a true worm of the ascaris kind.

If the above observations be correct, we must admit for certain entozoa a primitive species of generation different from any hitherto known—*Med. Times, Nov.* 16, 1850.

M. Bernard on the Absorption of Aliments.—The following is the substance of a memoir recently presented to the Academy of Sciences, by M. Bernard, on the absorption of alimentary substances by the chyle vessels.

All alimentary substances are reduced in the intestinal canal to three principal matters, viz., saccharine, albuminous, and fatty emulsion.

Absorption of Sugar by the Chyle Vessels.—On administering large quantities of cane sugar to the mammalia, M. Bernard has always found that substance in the blood of the vena portæ, whereas, the thoracic duct contains no trace of that substance. The author hence concludes, that sugar is exclusively absorbed from the digestive canal by the system of the vena portæ, and that saccharine substances traverse the liver before they reach the lungs.

In thus traversing the liver, saccharine substances undergo an important transformation. If a solution of two or three scruples of cane sugar be injected into the superficial veins of a dog, this substance, instead of being assimilated, is excreted with the urine in a few minutes. But, if the sugar be thrown into one of the branches of the vena portæ, and thus forced to traverse the liver, it is no longer eliminated, but assimilated and combined with the blood, just as occurs after normal digestion We may conclude from this that absorption by the system of the vena portæ is a necessary condition for the assimilation of sugar.

Absorption of Albumen.—When a weak solution of albumen from the egg is thrown into the jugular vein of a dog or rabbit, the urine becomes albuminous some time afterwards. M. Bernard considers that this shows a difference between the albumen of the egg and the albumen of the blood; and that the former requires to be modified before it can become incorporated with the living body. The modification takes place in the liver; for, when the albumen from an egg is injected into the vena portæ, it remains in the blood and is not eliminated by the kidneys. These experiments tend to prove that albuminous matters are absorbed exclusively by the vena portæ; they likewise show that cane sugar is subject to the same law, and that both can only be assimilated by undergoing the influence of the liver.

Absorption of Fat.—In a former memoir, M. Bernard demonstrated that fatty matters require to be converted into an emulsion by the pancreatic juice before they can be absorbed in the stomach. We might hence, *à priori*, conclude, that fatty matters do not require to pass through the liver, and this is the case. Still, however, it is certain, that fatty matters are sometimes obsorbed by the branches of the vena portæ as well as by the chyle vessels.—*Ibid from Bulletin de l' Acad.*

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NEW SERIES.—NO. LXXVII.—MAY, 1851.

ORIGINAL COMMUNICATIONS.

Lectures on Scarlet Fever. By CASPAR MORRIS, M. D., late Lecturer on Practical Medicine in the Philadelphia Medical Institute.

LECTURE IV.

Though it be true that scarlet fever is in an especial degree a disease of infancy and childhood, all ages are, to a certain extent, liable to it. The reports of the Registrar-General of Great Britain are exceedingly interesting from the extensive field of observation they cover, and furnish us with the most important information on this and similar points. Thus, with regard to the point which now claims our notice, we find that during the months of January and February, 1840, there were 345 deaths from the disease, in London. Of this number 326 were under thirteen years of age, and 19 only were adults. And of 2614 deaths included in his fourth report for the Kingdom, 2429 were children, 182

adults, and 13 aged persons. Now, when we take into view the commonly conceded fact that the proportionate mortality of adults is much greater than of children, the real difference in liability will be found to exceed that which appears to be represented by these numbers, great as it is.

Dr. George Gregory says: "This is one of the few diseases to which the fœtus in utero is liable. On the 28th of April, 1839, my youngest son was born, evidently suffering under some form of fever. The throat was affected on the following day, obviously from angina maligna. Eruption was never developed. The child drooped and died on the first of May." As no attempt is made to show that the mother was laboring under the disease at or shortly before the birth of the infant, and it is not even asserted that it was prevalent in the neighborhood or family, there is great room to doubt the accuracy of the decision, that this was a case of scarlet fever. That persons at the other extreme of life may suffer from it I know, having seen it prove fatal in a lady, certainly not less than fifty years old.

Negroes are equally liable to this disease with whites, and dark as may be their hue, there is a peculiar change produced in it by the eruption where that is present, which is the result of the mingling of the florid tint with their peculiar color. When sudamina occur their appearance is very marked on the dark surface. The symptoms do not vary from those of the white, nor is the mortality greater.

Before we dismiss finally the consideration of the nature and laws of the specific cause of this disease, it is proper to draw your attention to the well established fact, that it is one of those to which we are liable but once. Dr. Willan, whose opportunities for observation were unusually great, and whose authority is beyond question, says that in more than two thousand cases which passed under his notice, he never met with a second attack. Dr. Tweedie asserts that there are well authenticated instances, but does not speak of them as of his own knowledge. No instance of a secondary attack occurred to Dr. Chapman, in his large and long extended observation. Dr. Currie, of Liverpool, was compelled by long experience to "renounce the opinion he had early entertained, and to confess that the same individual is liable to the disease once only." Sir

Gilbert Blane, on the other hand, asserts that he met with one instance of scarlet fever occurring thrice "without the least suspicion of ambiguity." Analogy favors the idea that in this, as in all other diseases, there are such exceptional cases. At an early period of my professional course, I thought I had met with them frequently myself. Longer and more careful observation has convinced me that, in many instances, I had mistaken other diseases for scarlet fever, misled by the similarity of the eruptions. There is a form of eruptive fever caused by indigestion, closely resembling this disease in its appearance, and like it making its invasion very suddenly, which is often met with in childhood. Such cases have undoubtedly been mistaken for scarlet fever, and have given rise to some of the reputed instances of second and third attacks. When occurring in the case of a child with enlarged tonsils, which are liable to acute inflammation from cold, or disordered stomach, the resemblance to scarlet fever is very close.

Secondary attacks may, however, occur, though less frequently in this than some of the other exanthematous fevers. A medical friend of great eminence has informed me that he lost a member of his own family by a second attack. The first was, when the child was but four years old, was irregular in its character, the eruption imperfect, and not followed by desquamation. There was an abscess in the neck, and long continued ill-health succeeded. After an interval of five years, the second and fatal attack supervened. There was but little affection of the throat, but the rash was very vivid and extensive, and death occurred from exhaustion of the vital forces by the intensity of the febrile reaction. Another medical friend has assured me that a well-marked second attack occurred in his family.

In this disease, as in variola and measles, second attacks are more frequent in those who have suffered from it in its most severe forms, than when in the first instance it has been mild. It would appear as though, in these persons, there was a greater degree of susceptibility to the influence of the contagious principle or epidemic miasm, while there are others in whom this liability exists but slightly at any period of life. This difference of susceptibility to the influence of the causes of disease, is one of those mysteries which it is but little likely

we shall ever be able to solve. That of a given number of persons, equally exposed to an epidemic influence, only a small number will yield to the impression, is well known; and contagion itself finds the same exemption in kind, though not in degree. More extraordinary still, is the fact that this susceptibility varies in the same individual, at different times, without our being able to recognize the circumstances on which the fluctuation depends. Present exemption affords no security from future liability. Thus it can hardly be supposed probable that the two gentlemen who fell victims to it when more than forty years old, to whose cases I have already referred under another head, had never been exposed to the cause previously. About the same period, one of our most respectable physicians died from the disease. He had been many years engaged in a large practice, and must have encountered the complaint frequently, and been subject not only to the epidemic influence, but to direct contagion. In such cases the susceptibility must either have been recently developed, or some unknown power had caused it to lie dormant for years.

In this respect the laws of scarlet fever are perfectly consonant with those which govern the diffusion of other kindred diseases. Thus, Dr. Watson records an instance of fatal small-pox in the person of a lady beyond 70 years of age, who had nursed two generations of her descendants in the disease, and was therefore very naturally thought to possess an entire exemption from liability to it. There is a certain amount of susceptibility which is always present even in the persons of those who have formerly had the complaint, as is evidenced by the sore throat which affects those who are engaged in nursing persons sick with this disease. Such cases may indeed be considered as instances of secondary affections, especially as I have already proved that they are capable of propagating the disease. There is one fact connected with this branch of the subject which deserves to be impressed upon your minds, as it will naturally suggest important precautions. You will often find an error in diet, exposure to cold, or undue fatigue, prove the direct agent in exciting the disease. In such instances it is manifest that the specific cause was present in the system, but kept in subjection by the conservative force, until some accidental circum-

stance disturbed the balance of health, and afforded the opportunity for development which was needed. To caution persons against such exciting causes when the disease is prevalent in a neighborhood or has invaded the family circle, is, therefore, the duty of the physician.

The *mortality* of scarlet fever varies greatly, occurs at different periods of the progress of the case, and depends on various causes. The *prognosis* is therefore necessarily indefinite. So treacherous is the disease, and so liable to serious complications and fatal sequelæ, that it is best always to give a guarded opinion as to the result. You may say, with safety, that no case is so desperate in its symptoms as to shut out the hope of recovery; but must at the same time admit that none is so benign as to exclude anxiety. I still remember perfectly a lesson learned in the earlier part of my professional career. I was attending the child of a clergyman; of course, therefore, an object of attention for a whole congregation. The case was one of the mildest I had ever seen; scarcely any anginose affection, the rash florid, the nervous centres unaffected. The progress of the disease was regular till the fourth day. It was a Sydenham case, "scarcely worthy the name of disease." Under these circumstances I ventured to congratulate the mother on her happiness. The disease was making fearful havoc in many families; she would be exempt thenceforth from the apprehension in which she had participated with all parents. The case became complicated with laryngitis, and, forty-eight hours after, the child was a corpse. I have, on the other hand, seen a patient lie utterly unconscious of surrounding objects, with a livid eruption, entire loss of the power of deglutition, constant discharge of putrid sanies from the mouth and nostrils, and uncontrollable jactitation—and others with convulsions and croup,—and yet recover. You will not, therefore, be surprised when I tell you that my uniform habit is to speak cautiously of the lightest, and to encourage hope in the gravest case.

There is no doubt that the mortality among adults is greater in proportion than among children. To pregnant and puerperal women, it is almost inevitably fatal. I have known several cases which proved mortal but have never heard of a recovery. The character of the prevailing epidemic should always be taken

into consideration in forming an estimate of the probable results of any case, as in no disease is the mortality more variable. This is proven by the personal experience of every practitioner. We may, however, refer to the report of the London Fever Hospital, given by Dr. Tweedie, as offering an illustration which cannot be questioned; 644 cases were treated in that institution during the twelve years from 1822 to 1833 inclusive. Of this number, thirty-eight died, being at about the rate of 6 per cent. upon the whole series of cases. But when we descend to the investigation of the annual mortality, we find that while, in 1829, the rate was as high as one in six, in 1832 it fell as low as one in forty. Dr. G. Gregory refers to the observations of a Mr. Ward of Bodmin, who reports four hundred and forty-two cases with thirty-six deaths; of these cases, three hundred and twenty-four were accompanied by the eruption, and of these, twenty-six died. While of one hundred and eight without eruption, ten died, thus making but a small difference in favor of those cases in which the skin is involved. Dr. Condie, of this city, reports two hundred and sixty cases, of children under 12 years of age, occurring during three epidemics of considerable extent and severity, with 45 fatal results. Dr. G. Gregory states that 6 per cent. may be assumed as the medium rate of mortality.

Though it be true, as I have before remarked, that the general character of the prevailing epidemic will throw light upon the probable result of the individual cases, it is right that you should know that there are exceptions to this rule. Not only do we find some cases of a very mild character occurring at the time, when the disease is generally malignant, but the reverse also takes place, though less frequently. You may adopt it as the general rule, that, whatever may be the prevailing type, the character of the first case which is seen in a family or school, will attach itself to all the subsequent cases. Thus the disease in the House of Refuge, was certainly very mild, no death having occurred, though the type of the epidemic, then prevailing in the city, was severe.

When, in forming your prognosis, you come to the consideration of the individual symptoms, I would caution you against placing any reliance on the extent of the eruption, as affording a criterion by which you may determine the degree of risk. I have frequently seen cases, in which the whole surface

was covered with a vivid rash, prove fatal, and equally often have known the ready recovery of those in which there was none, or but little around the joints or on the body.

Simple scarlet fever is certainly much less likely to result fatally than the anginose, and this less so than the malignant and congestive, or irregular. The occurrence of convulsions in any stage, or either form, is always an indication of great danger. I at one time thought them a certainly fatal sign, but I have known several such cases to recover. Violent delirium, manifesting itself by shrieks like those of meningitis, is also of bad augury, no matter how slight may be the affection of the throat; so also is stupor with grinding of the teeth. Croup is a very serious complication and should cause you to watch the case in which it occurs, narrowly. The enlargement of the neck without a corresponding degree of swelling of the tonsils and adjacent mucous membrane, is also of evil omen; especially when there is the acrid discharge from the nostrils, which indicates the existence of ulceration of the posterior nares. The continuance or increase of the febrile symptoms, after the fifth or sixth day, is also a bad sign, as it proves the existence of some local lesion. A dusky or livid color of the eruption is always a bad sign, whether it result from the deficient aeration of the blood, or some other cause; and so are great sighing, and a feeling of faintishness, and hurried respiration. Ulceration of the commissures of the mouth and eyelids are unfavorable events, and so are coldness of the surface, whether it be dry, or bedewed with moisture.

The subsidence of the frequency of the pulse, and the diminution of the redness and swelling of the parts about the throat, in the anginose variety, are circumstances which should afford encouragement. Among the favorable signs, none should be hailed with greater satisfaction than a warm perspiration; whether it is found in the simple, anginose, or malignant form. Next to this is the diminution of the heat of the skin, with or without moisture, provided it do not descend to a degree of coldness less than the standard of health.

Death may result from various causes, and at several stages of the disease. The violence of the primary shock may be such that the system may not react from it, or the reaction may be

so severe as to prove fatal. The nervous centres may be so deeply impressed that death shall ensue from the destruction of the balance necessary to their healthy action. From any of these causes it may occur within the first week of the disease; nay, even within the first twenty-four hours. Dr. G. Gregory thinks sixty hours, or the third day, the period of greatest danger. But even when the first week has passed, and the primary symptoms have yielded, the causes of mortality still stand thickly around the course of the patient. Inflammation of the larynx, the pericardium, or the kidneys, may be developed and produce a fatal result; or the patient may die from effusion in the ventricles of the brain or the thorax, or from the long continued exhausting effects of abscesses or diseases of the bones.

Each of these latter causes of death will of course leave a corresponding lesion in the organ affected. But in those cases where death has occurred in the early stages, it would be irrational to expect to find any morbid appearances in this, more than other pure febrile diseases. The fatal impression has been made on organs which express their changes by signs which pass away with life and leave no trace behind; but by some authors the brain is said to be more vascular than natural in cases where there has been very violent delirium, and instances are reported of increased vascularity and opacity of the arachnoid. We are not informed at what period of the disease death had occurred in these cases. In the malignant and anginose forms we shall of course find the traces of the disorganization of the mucous membrane of the fauces and adjacent parts which has been noticed during life, and I have seen ulceration of the mucous membrane lining the larynx, and abscesses about the cartilages.

Though there can be no doubt that the blood during life is much changed from its healthy condition, there is nothing peculiar in its state after death. It is reported to have been found sometimes fluid, at others abounding in coagula, sometimes collected in especial organs, and at others more equably distributed. The proportion of fibrine is said to be slightly in excess in some instances. This would result from any local inflammation which might be set up on the progress of the case. The spleen in some instances has been found enlarged, soft and reddened.

There are several *complications* which are met with in the dif-

ferent forms of scarlet fever, with which you should be made familiar. The sore throat in the anginose forms, varies in degree, and is often attended by swelling of the glands of the neck, impeding deglutition, even in some cases to the extent of entire interruption. It is by no means an uncommon event for the food and drink to be returned through the nostrils, instead of passing into the œsophagus. Ulceration of the mucous membrane, and even sloughs of the subjacent parts are found in extreme cases. Delirium is by no means an unfrequent attendant, and may be either wild and violent, or of a low muttering form. In the former case, which is confined to the simple and anginose varieties, it is frequently associated with convulsions; in the latter, which belongs to the malignant, with coma. Laryngitis is another serious complication which may occur in either form of the disease, and at any stage of its progress, and is always a formidable symptom. Violent rheumatic pains in the limbs are occasionally found in the earlier stages, as well as among the sequelæ, and there is often more or less muscular rigidity of the neck.

Ulcerations of the mucous membrane of the nasal passages, and the extension of the inflammation through the eustachian tube to the internal ear, are also met with in some cases, giving rise to the most intense suffering at the time, and involving the disorganization of the organ of hearing. Pneumonia *may* also occur in this disease, but more frequently violent affections of the heart indicated by labored respiration and distress in the præcordial region. Dr. Gregory describes the case of a lady "who was seized with scarlet fever at the time of parturition. The labor was long and severe; she perspired profusely; the heart labored violently. The next day scarlet fever appeared. The heart exhausted by previous efforts gave way, and in about fifteen hours from the appearance of the eruption, became engorged. A frightful feeling of suffocation supervened, and the pulse for a few minutes was imperceptible at the wrist. This feeling subsided, but the heart never regained its natural condition. Dyspnœa increased, and in twenty-four hours more, the blueness of countenance and incipient delirium showed that the lungs were implicated, and that waves of ill oxygenated blood were permeating the brain. Twelve hours longer of this semi-asphyxiate state closed this sad and painful scene."

The *Diagnosis* of scarlet fever is, you will perceive, not devoid of difficulty, and is yet always important. The anxiety of parents is excessive. Often, very often, have I been called at a late hour in the evening to see a child, suddenly seized with fever between the time at which it had been put to bed, and the hour at which the parents retired. The flushed cheek and restless sleep had excited the apprehension of a mother, some of whose friends had suffered from this devastator of the nursery. The power of allaying these fears by the positive assurance that no such danger was impending, is one of those which will afford you as much gratification as any you can exercise. Your own satisfaction in the treatment of a case is also much enhanced by certainty as to its character. Circumstances may also arise, in which it is most important to be able to give a prompt decision. I once, needlessly, caused the dismissal to their homes, of the children of a boarding school, thus spreading alarm into many families, and interrupting the pursuits and materially interfering with the interests of a most worthy family, by the hasty and erroneous determination that one of the children had scarlet fever. The opposite error might have been still more disastrous in its results. Let me, therefore, impress upon you the importance of a careful study of the signs of distinction. The well marked anginose and malignant forms can not be mistaken. It is only in the simple and irregular cases that we are liable to error. These, however, you remember, may give origin to the most violent and fatal forms, and even the mildest cases may become serious in the results, if not properly treated. In every case where there is a sudden invasion of fever with sick stomach and the occurrence of rash within forty-eight hours, you should *suspect* scarlet fever. Let this suspicion be your own, however, until you have carefully investigated the entire history of the attack, and examined well the symptoms, bearing in mind that important results may follow your decision.

There are several diseases which may be mistaken for simple or anginose scarlet fever. Measles, you know, was long confounded with it. Sore throat with fever resembles it in some points. The rash which often accompanies indigestion in children is very like it. There is a very mild form of disease, known

popularly by the name of "the scarlet rash," which closely resembles it, and roseola has often been taken for it by superficial observers.

There are several points of difference between Measles and Scarlet Fever noticed by authors. The period of incubation is said to differ. When, however, you reflect on the impossibility of determining the time of exposure in many cases, and that when this is known, the mere fact of exposure will determine the nature of the case, you will at once perceive how little benefit can be derived from such an observation. I have, moreover, already shown how very uncertain is the period of incubation. It is quite certain, however, that measles has never been known to occur so promptly after exposure as scarlet fever.

The time, after the development of febrile symptoms, at which the eruption occurs in the two diseases in those cases which pursue a regular course, is very different. The rash of scarlet fever is observed often simultaneously with the febrile invasion, and generally within twenty-four hours; that of measles does not show itself in less than seventy-two hours, or on the third or fourth day. The invasion of scarlet fever is marked by nausea or vomiting, thus fixing the stomach, and passages which lead to it, as the organs involved. The first stage of measles, on the other hand, is indicated by catarrh, sneezing, redness of the conjunctiva cough and hoarseness; thus exhibiting the tendency of the disease to fix on the mucous membrane of the air passages. This difference in the local tendencies marks the whole course of the disease and its sequelæ.

There is also a marked difference in the appearance of the rash. The eruption of measles may be first seen about the roots of the hair and behind the ears; in circumscribed well defined spots, which as they spread, assume frequently an arrangement which has been called crescentic, several spots being grouped together and surrounding patches of skin of perfectly natural appearance. From the face, it gradually extends itself downward over the whole person. In the regular course of scarlet fever, there is a vivid efflorescence covering the whole surface of the head and neck simultaneously, and often even the whole trunk, leaving no spot unaffected. The papular eruption scattered through the efflorescence of scarlet

fever, which gives the appearance of stigmata, noticed in the description of the disease, is unknown in measles. There is a marked difference also in the color of the rash of the two diseases. In scarlet fever it is of a florid or vermillion tint; in measles there is at the very outset a dull lake color. The first declines by fading away; the last becomes darker or more dusky.

In the sequelæ of the two diseases, we find the most striking evidence of their diverse origin and nature.

In scarlet fever we have affections of the brain, the kidneys, the cellular tissue, ulcerations of the throat and ears, and abscesses about the neck, rheumatic pains, and if any of the affections of the air passages occur, it is evidently by mere extension from the adjacent parts. In measles we have bronchitis and pneumonia, and sometimes diarrhœa. But while there are these important and well marked points of difference between the two diseases, it must not be concealed that you will occasionally meet with instances in which your efforts at discrimination will be tasked during the progress of the case; and it is even possible that in some there may be a mongrel disease, as though it were the result of a mixed influence; commencing as scarlet fever and yielding in its course to the influence of rubeola. There is often in cases of variola or varioloid a diffuse efflorescence on the second or third day which very closely resembles that of scarlet fever, and the resemblance is rendered more embarrassing by the sore throat which so generally occurs in variola. It may be distinguished from it by the character of the febrile symptoms which accompany it. The restlessness and gastric oppression and pain in the back, of the variolous disease, sufficiently mark its character, and are never present in scarlet fever. Neither is there the frequent pulse to which I have drawn your attention, as belonging especially to the disease. That of the variolous impression is less frequent and softer, the absence of the dotted points which are interspersed through the efflorescence on the skin, and always appear in the throat, will afford assistance in determining the nature of the case. Attention to the symptoms affords one of the best points of discrimination in cases of eruption resembling scarlet fever which occur in the signs of indi-

gestion in childhood and infancy, and the best additional diagnostic sign I can furnish you is found by looking into the throat. The eruption of scarlet fever is *always* found there, if it affect the external surface. The appearance of the elongated papillæ through the white fur, is less to be relied on. I have been deceived by it. Not so, however, the appearance of the tongue on the second or third day. The sudden throwing off of the coat of fur, while the surface is left red and glossy, is decidedly characteristic and will never deceive you, as it occurs in no other disease at this early period.

The eruption which occurs about the third day of typhus fever, bears a closer resemblance to that of measles than to the one now under our notice. The age of the patient will afford aid in forming an opinion, typhus fever being more frequent in adult life, and scarlet fever in infancy and childhood, while the history of the case will always enable you to trace genuine typhus fever to its origin in direct contagion or exposure to the peculiar circumstances which give rise to it.

(To be Continued.)

Case of fracture of the anterior portion of the Os Calcis. By W. S. W. RUSCHENBERGER, M. D., Surgeon, U. S. Navy.

November 24th, 1850. Lieutenant W——, (aged 32 years, athletic, weighing 190 pounds), while in a paroxysm of mental aberration, attempted to escape from the U. S. Naval Hospital, New York, where he had been confined as a patient for several days. Between seven and eight o'clock, P. M., he leaped from the top of a wall, which encloses the grounds, at a point where it is fifteen feet high; and alighted upon his soles on the hard, gravel-paved side-walk of the street. At the time, he was in a dressing gown and slippers.

He was unable to rise upon his feet. Some passers-by conveyed him into a neighboring grog-shop, where I examined him about ten minutes after the fall. It was stated, he was insensible when picked up, and that he had swooned after he was placed in a chair. When first seen by me, he was very pallid and faint; he expressed his opinion, formed from a sense of pain alone,

that "all the bones of his feet were crushed." Both ankles and feet were contused. Distinct crepitus was heard on moving the left foot. Below the malleolus externus and a little anterior to the axis of the fibula was a tumor or projection, caused by a fragment of bone, estimated to be about a cubic inch in size, which was seized between the thumb and fingers, and moved easily but not extensively beneath the skin. Moving this fragment caused distinct crepitus and severe pain. The toes and metatarsus could be turned inwards, on a plane with the sole, almost to a right angle, owing to a relaxation, or partial separation of the metatarsal from the tarsal bones. There was nothing abnormal observed in the motions of the astragalus upon the tibia. There was no displacement of the posterior extremity of the os calcis; but the patient stated subsequently, that when his consciousness returned, he found the heel bone drawn up out of place. There was no fracture of the fibula or tibia. Pressure posteriorly to the cuboid showed an unusual yielding space in that region.

The patient was conveyed to his bed in the hospital, complaining considerably of pain. Cold water dressings were applied to the feet and ankles; and a fourth of a grain of meconate of morphia in solution was administered.

The bowels had been moved twice during the day.

25*th*. Ankles and feet considerably swollen, ecchymosed, and very painful. Cold water dressings and meconate of morphia at night.

27*th*. Has less pain; passed a better night; seemed quite rational. Continue treatment.

28*th*. Appears to be perfectly sane. Better; persist.

29*th*. Swelling and pain of ankles less; continue treatment.

30*th*. (Sixth day after accident.) Left ankle and foot carefully examined this morning. The anterior and external portion of the os calcis, which articulates with the os cuboides was fractured and separated; the fragment lying below, and projecting externally beyond the malleolar process of the fibula. Firm steady pressure by the thumbs, directed forward and inward, reduced it, the fragment suddenly slipping into place. A roller was turned firmly around the foot and over a compress placed upon the fractured portion. The entire leg and foot

were then encased in felt, previously softened, and the whole dressing retained in place by a roller.

December 2d. From the instant the fracture was reduced, he has had no pain in the foot; he seems to be of sound mind.

Although unable to bear either foot in a pendent or vertical position without discomfort or pain, Lieutenant W——, at his own earnest request, was conveyed to his home.

The patient, who is restless and restive in disposition, very soon moved about, and has recently visited Washington City; I have been told he is not lame.

Remarks. The history of the above case of rare fracture is derived chiefly from notes by Passed Assistant Surgeon J. B. Gould, U. S. Navy, who was associated with me on duty when it occurred. The accident was probably caused by the sole of the foot coming in violent contact with some inequality, such as a small pebble, opposite to the anterior extremity of the os calcis.

About a week after this fracture, a boy of seventeen years of age, weighing probably less than a hundred pounds, attempted to desert, and leaped the wall at the same point. In his case there was severe contusion and sprains of both ankles, but no fracture. He was able to limp away nearly a half mile.

The influence of the meconate of morphia, as far as it could be determined by administration in the above and one or two other cases, does not differ remarkably from that of the other salts of morphia.

Philadelphia, April 18th, 1850.

Case of Rupture of the Uterus. By THOMAS J. GALLAHER, M. D. (Read before the Young Men's Medical Association of Pittsburgh, Feb. 5th, 1851.)

Mrs. F., a hearty, robust, and healthy Irish woman, aged 30 years, was taken in labor, with her first child, on Friday, January 24th, 1851. In a short time the membranes gave way, when a large quantity of the liquor amnii escaped from the uterus, while the patient was yet walking about the floor. Her husband and some other men came into the house about this time, which frightened her so much that her pains entirely ceased. On the

following day, at one o'clock, P. M., her pains returned, when a midwife was sent for, who, upon an examination per vaginam, pronounced it a case of breech presentation, and on that account refused to take charge of it. At four o'clock, P. M., Dr. Cahill was called to the woman. He found the uterine contractions regular in their recurrence, and of usual frequency and intensity. The right elbow of the fœtus was felt protruding through the superior strait. At this time the liquor amnii had been drawn off twenty-eight hours, in consequence of which, the walls of the uterus were so firmly contracted around the body of the child as to make it impossible to turn. No attempts of the kind were, therefore, made; the Dr. contenting himself with holding the arm to one side, so that if a favorable change should take place in the position of the child, the head might descend. This expectation, however, was not realized, as about 9 o'clock, the right hand descended through the os externum. Between eleven and twelve o'clock the woman had a few pains more severe than the rest, during which she shrieked, and said she felt something tear within her, after which she had no more.

Finding the woman no nearer delivery than when first called in, and noticing the occurrences of alarming symptoms, the Dr. now requested consultation. Dr. Draine was accordingly sent for. Dr. D. remained with her till three o'clock in the morning, in company with Dr. C. Shortly after the occurrence of the severe tearing pains, above mentioned, the contractions of the uterus entirely ceased. At this period the protruded arm was pushed without any difficulty above the superior strait, and laid along the side of the child. No hemorrhage had occurred to depress the patient, while she evidently was sinking, from some cause not known to the medical gentlemen present. At this juncture it was concluded to have further medical aid. Accordingly, between three and four o'clock, in the morning, I received a polite note from Dr. Draine, requesting my assistance in the case. On arriving, I learned the history of the case, as above given,and found the woman in a most deplorable condition. Her extremities were deathly cold, her pulse was imperceptible at the wrist, and the contraction of the womb had ceased for several hours. She threw up the contents of her stomach while I was sitting at her bed-side, and appeared in great agony, tossing about the bed.

Passing my finger into the vagina, I found the placenta lying loosely within the os externum, which I removed without difficulty. Finding the cord pulseless I cut it, when no blood flowed from its cut extremities. From this I well knew that the child was dead. On passing my hand up the vagina, I felt the right shoulder of the child, presenting at the superior strait, with its head in the left iliac fossa, and its back towards the abdomen of the mother. To the left of the child was a thick, rough and hard fleshy body, larger than my hand, which I could move slightly about. At this time I was unable to conjecture what this substance could be. The child could be moved about with great ease, and its vertex was brought to the superior rim of the pelvis without any difficulty, but then there was no contraction of the uterus to make it descend. My hand was then pushed higher up on the body of the child, when, to my surprise, it was encircled by the intestines of the mother. The conviction immediately flashed upon me that the uterus was ruptured, and that the child had escaped from its cavity to that of the abdomen. Examining the case still further, I found the child surrounded by intestines and omentum, while I was convinced that the rough, fleshy body already described, and lying on the left side of the mother, was the body of the uterus in a collapsed state. I could not ascertain how much of the uterus was implicated in the accident, but the whole superior part of the vagina, excepting some on the left side, was torn from its connection with that organ. The laceration was so extensive and gaping, that on the first introduction of the hand it was difficult to detect it.

On withdrawing my hand I informed the medical gentlemen present as to the condition of the uterus and vagina, and the situation of the child, and expressed my conviction that it was entirely unnecessary to deliver the woman, as she would assuredly die whether delivered or not, and the child was already dead. All efforts of the kind would merely give her unnecessary pain, without contributing to save her life. I insisted it was better to let her die in peace than to give her unnecessary torture. After some conversation on the subject, it was decided to abandon the unhappy sufferer to her fate.

Between eight and nine o'clock in the morning, Dr. M'Neal visited with us the patient, and fully concurred in the diagnosis

and prognosis of the case which we had made. He likewise concurred in the opinion that it was unnecessary to deliver her.

After suffering great pain from the supervention of fatal peritonitis, the patient died between six and seven o'clock the same evening. She lived at least nineteen hours after the uterus had been ruptured, and fifteen after the pulse had ceased to beat, and her extremities began to be cold.

No post-mortem examination could be obtained.

Remarks.—In most cases of rupture of the uterus, the organ is found in a morbid condition, but whether, in this case, there was disease, could not be ascertained. The inference to be drawn from the previously healthy condition of the woman, and the circumstances of the case, is, that the womb was not diseased before the commencement of labor. The cause of the rupture must therefore be explained on other grounds.

The presentation of the shoulder was no doubt the *predisposing*, whilst the frequent, powerful and long-continued contractions of the uterine fibres around the body of the fœtus when it was immoveably fixed in the passages, were the *immediate* cause of the casualty.

Some one might ask, why not deliver at once when the nature of the accident was first discovered? I answer, had we seen the patient early, and detected the nature of the complication in time, it would have been our imperious duty to turn and deliver at once. This would perhaps have given the woman the only chance, slim as it was, of life. But why attempt to deliver her when the fœtus is dead and the woman dying? It certainly would have imposed on the mother unnecessary pain. Another view of the case is,—Had we delivered the dying woman, and had she died shortly afterwards, as unquestionably she would, her friends, and the clamoring multitude always found in such places, would have blamed her death, and perhaps the child's, upon us, and trumpeted it to the world. Therefore, for the comfort of the woman, and the safety of our own reputation, we think we acted the proper part in abstaining from any unnecessary interference.

[From the conclusions of our correspondent we feel compelled to dissent. It appears to us that the nature of the accident was

evident sufficiently early to give the patient a chance for her life, since shortly after its occurrence the arm was pushed up and laid along the side of the child, and when seen by Dr. G., the body could be moved, and the vertex brought to the superior strait. Surely, at this time, the woman might have been delivered by version by the feet, and not left to her fate. Under such circumstances, it is even recommended, by high authorities, to perform the abdominal section, rather than let the woman die undelivered. In all cases where it is possible, the testimony is in favor of early delivery; and the cases of recovery confirm this decision, for in all but one or two, the women were delivered. In confirmation of the opinion which we thus advance in all kindness and respect to our correspondent, we cite the authority of Ramsbotham, Burns, Dewees, John Clark, Collins, Velpeau, Meigs, Siebold, Baudelocque, Boivin, Churchill, and others, many of whom express themselves in favor of delivery even when the accident has been of some hours duration, or the woman exhausted by constitutional shock and irritation. "The properest indication must always be to extract the child."

As regards the second reason for non-interference—to wit: the clamoring of the multitude—we can only say, "*fiat justitia, ruat cœlum.*"—EDS. EXAMINER.]

To the Editors of the Medical Examiner.

Gentlemen,—I beg to ask the favor of you to republish the following article, from the "American Journal of Medical Sciences," in the May No. of the "Medical Examiner," if practicable. The object of this request is to correct, as promptly as possible, some errors made in printing the original, and to give publicity to the explanatory note, which, contrary to my expectations, was omitted in the American Journal of Medical Sciences.

Very truly and respectfully yours, &c,

E. B. GARDETTE.

Proposition to establish a Lectureship on Dental Surgery in the Medical Colleges.

The undersigned, a practicing Dentist of Philadelphia, begs leave respectfully to call the attention of the trustees and

medical faculties of the medical schools of the United States to the propriety and advantages of establishing an adjunct professorship to the chair of surgery, in which the speciality of Dental Surgery may be taught to the medical student seeking knowledge in their institutions.

In making this suggestion, he indulges the confident belief that the existence of such a chair would be no less useful to those who may be compelled to practice some branch of Dental Surgery, as part of their duties in general surgery, than to the smaller number who may determine to embrace that speciality as their profession.

The undersigned would offer for your consideration some reflections that seem to render this proposal consistent, not only with the wants of the student of medicine and the public, but with the duty and the interests of the medical schools which may act upon this request in such form as seems most proper to their own judgment.

It will scarcely be assumed by any trustee, and still less by any member of a medical faculty, that the profession of the Dentist or its duties, are less important to mankind than any other of the specialities of surgery—whether of the oculist, the aurist, or the lithotomist; and therefore it is needless to consider such a question open for debate, or requiring argument in a country, especially, where the services of good dentists have been so widely and universally needed. It being granted, then, that the science itself is of equal importance with the other departments of surgery, it is an undeniable truth that, whilst all other specialities are taught and included in the professorships of medical schools generally, the principles and practice of dental surgery have received no attention, or certainly none that would permit the graduate of medicine to feel that he was qualified for the simplest duty of the dentist.

Such a state of things was perhaps an unavoidable evil when men could not be found who were competent to teach the principles of our science, and when there was need of a comparatively small number of dentists; and hence no such aid was then called for from the medical colleges. But at this time there would seem to be required about twenty-five hundred dentists, more or less, throughout the United States, which is sufficiently proved by the

fact that about that number are believed to be engaged in the practice of the profession, after some fashion or other—good, bad and indifferent; and to supply an increasing demand for well-educated dental surgeons, as well as to raise the standard of that profession, would appear to be a matter of common interest.

It is in evidence of the need of such improvement, that within a few years, two or three colleges of dental surgery have been established in this country under the sanction of charters from the States in which they are located; and without examining into their history or their influence upon the profession of the dentist, it is, at least, a source of regret that they must be regarded as the offspring of your neglect, and their very existence a reproach upon medical institutions for their unjust and exclusive course toward the science of Dental Surgery. It would seem an act of inexplicable unkindness to have thus singled out the profession of Dentist from among the specialities of Surgery, and forced it into an attitude of independent self-protection; but a gentleman who fulfils the duties of both medical practitioner and Dentist with such distinguished abilities as to be an honor to both professions, has traced truthfully the origin of the neglect of which the Dentist complains. The undersigned quotes from a valedictory address to the graduating class of Baltimore College of Dental Surgery, March 1850, when speaking of the early periods of the existence of a Medical Faculty:—

"They condemned, without stint, a calling they knew not how to practice, and a practice they knew not how to improve. Such of the faculty as were learned in their profession were found always competent and fully prepared to be oculists, aurists, or lithotomists, or to devote themselves to any other branch of the profession which their interest, inclination, or talents might determine, *except* that of dental surgery. This branch seemed to require something more than medical knowledge; it required great mechanical skill—an education of the hand as well as of the head—a kind of education they had not received and knew not where to acquire, and yet affected to despise. The necessities of the community cried aloud to them for help—a help which they could not bestow. This drove many sufferers ta seek dental aid out of the medical profession, and to obtain that help which mechanical genius alone could supply. At this the profession seemed mortified and chagrined, and loudly mocked at those who

dared to supply their delinquencies, and united as one man in deriding the uneducated dental mechanic. They first created the necessity for an empiric, and then croaked forth their withering contempt on the creature their own ignorance had made."

Thus has dental surgery been left to struggle through endless impediments and difficulties, instead of being regarded as a link, however humble, in the great chain of medical science, which should with patriarchal strength and harmony foster and embrace every branch of the healing art.

It is now believed that, among the number of medical students who attend each of the schools, there are many who would gladly devote themselves to the speciality of dental surgery, and it is from among these, and at the early age at which they generally devote themselves to medical studies, that good Dentists could be formed; they should still be required to earn and receive a diploma with the title of M. D., as a guarantee of fitness to practice and a claim to confidence as dentists. Even among the number that annually graduate, either to practice medicine generally, or limiting their attendance to their own families and dependents at the South, a correct knowledge of the theory and practice of dental surgery, such as might be derived from a course of lectures, would be highly valuable. And it is believed there would not only be a direct increase of good Dentists, but a desirable addition to the number of those who should be competent to determine what constitutes a good dentist.

The establishment of separate schools for each speciality in medical science (and why should there not be for the Oculist, or the Aurist, as well as the Dentist?) would appear to be the dismembering of a great family, thereby lessening its influence for good, as well as that power which is justly derived from an *esprit de corps* subsisting in every branch of an elevated and honorable profession. In this expression of opinion as to the ultimate tendency of dental colleges, the undersigned is actuated by no unkind, selfish or invidious feelings, but, on the contrary, he gives due credit for the efforts that have been made and are making to improve the profession; and to the Baltimore College of Dental Surgery he is personally grateful for acts of courtesy and kindness towards himself, and to the memory of his father. In these Institutions it appears that the majority of Professors are medical men, and in some instances, teachers also in medi-

cal colleges, thus performing double duty. Would it not seem more consistent and reasonable to attach *one Dentist*, in the capacity of teacher, to a *Medical* Faculty, than to get up a *Dental* Faculty chiefly composed of *Medical men?*

The Dentist must be the teacher of Dentistry, and his profession is but an atom of Medical Science: it is in vain for him to attempt independence, or play the part of King Canute's flatterers to medical men: the tide of improvement in Dental Surgery thus far with all respect and due deference) is not under the control of the Doctors.

The educated dentists in the various parts of the United States are sufficiently numerous, it is believed, to fulfil such duties as might be assigned them in each of our medical colleges. The students who now attend the dental schools would in this event be added to the number of matriculants in the medical classes of the country, and the need of separate institutions would cease.

Frequent occasion for consultations between the physician, the surgeon, and the dentist, has been felt by almost every practitioner of medicine, as a necessary consequence of the connection and sympathy reciprocally existing between the teeth and many serious disturbances of the general health; such sympathies would naturally seem to suggest the mutual dependence between the physician, the surgeon, and the dentist, and should be a good reason for some similarity and sympathy in their modes of education. The benefits from such a state of things as the mind can readily anticipate would not rest here; medical men would sometimes, no doubt, receive important aid from the dentist, in tracing to their true origin many diseases of the head and face that now baffle their skill.

Whatever action your medical faculty or board of trustees may see fit to take in reference to these suggestions, and the object they are designed to promote, the undersigned may at least respectfully urge that they would seem to demand fair and kindly consideration, as involving matters of deep concern to the community, for whose safety and advantage all medical learning is sought, and medical colleges instituted and fostered.

E. B. GARDETTE.

NOTE.—It may be proper to state that this paper had been some weeks in the hands of the editor of the American Journal

of Medical Sciences, for publication, when the writer was called upon to sign a petition to the Legislature of Pennsylvania for the establishment of a College of Dental Surgery, to be located in Philadelphia. This application for his name being the first knowledge he had of the existence of any such scheme, he could not join in its objects consistently with the opinions already promulgated. And besides, he has learned that a charter for a Dental College had been already obtained from the previous Legislature by Dr. J. R. Burden, who has not put it in active operation from the difficulty of finding suitable Dentists to fill the chairs. E. B. G.

CLINICAL REPORTS.

Pennsylvania Hospital—*Surgical Wards.—Service of* Dr. Norris.

Cases discharged from November 1, 1850, *to March* 1, 1851.

	Cured.	By request.	Died.
Abscess,	10	0	0
Anthrax,	1	0	0
Boils,	1	0	0
Burns and scalds,	2	0	3
Calculus,	0	0	1*
Caries,	2	0	0
Cancer,	1	2	0
Cataract,	1	0	0
Concussion of spine,	1	0	0
Conjunctivitis, (Chronic,)	1	0	0
Contusion,	23	0	0
Fistula in ano,	1	0	0
Fractures, simple,			
Arm,	5	0	0
Clavicle,	5	0	0
Forearm,	5	0	0
Jaw,	1	0	0
Leg,	6	0	0
Pelvis,	1	0	0
Thigh,	12	1	0
Fractures, compound,			0
Arm,	1	0	0
Finger,	2	2	0
Jaw,	1	0	0
Toes,	2	0	
Foot,	1	0	0
Forearm,	1	0	0
Leg,	3	0	1

* Scarlatina.

	Cured.	By request.	Died.
Gangrene of foot,	1	0	0
Gonorrhœa,	2	3	0
Hæmorrhoids,	2	0	0
Hydrocele,	3	1	0
Inflamed arm,	1	0	0
" hand,	1	0	0
" knee,	1	0	0
" leg,	1	0	0
" breast,	1	0	0
" face,	1	0	0
" eye,	1	0	0
" finger,	1	0	0
" bladder,	0	1	0
Inverted toe nail,	1	0	0
Iritis,	1	0	0
Luxation,	5	1	0
Necrosis,	1	0	0
Moveable cartilage in knee joint,	1	0	0
Paronychia,	4	0	0
Retention of urine,	0	1	0
Sprain,	1	0	0
Staphyloma,	1	0	0
Stricture,	1	0	0
Syphilis,	22	8	0
Tumor of abdomen,	0	1	0
Ulcers,	10	4	0
Wounds,			
Gunshot,	6	0	0
Wounds of abdomen,	2	0	1
" arm,	4	0	0
" eye,	2	0	0
" finger,	0	1	0
" foot,	1	0	0
" scalp,	11	0	0
" tongue,	1	0	0
" throat,	1	0	0

NOTE.—I am indebted to the librarian for the above table.—J. J. L.

The following pages, though possessing neither special interest nor novelty, are taken from some notes made during the winter.

Abscess.—Under this head are included several cases of mammary abscess, occurring in nursing women. The writer is not aware that in the treatment of this distressing affection, there is anything peculiar to this hospital. The plan of encompassing the gland, after the acute inflammation has subsided, with broad straps of adhesive plaster, applied from its base, is generally adopted, with, it is believed, much benefit, not only by the support given to the depending breast, but in promoting by its com-

pression, the filling up of sinuses and the discharge of pus from the part.

Burns and Scalds.—A large number of burns and scalds have been under care since last report. These have been treated, as mentioned in the 12th No. of the *Examiner*, 1849, varied to meet particular indications.

A distressing case of burn from sulphuric acid, is now under care. The patient, a robust laborer aged 26, was admitted January 19th, 1851, a pitcher full of oil of vitriol having, fifteen hours before, been thrown at his face, by an Irish girl, in revenge for some real or imaginary insult.

The forehead and upper half of the face, the eye-lids and both scleroticæ, were completely cauterized, presenting the appearance of moistened kid leather. Through the partially opaque corneæ the pupils were seen, dilated but immoveable, and were subsequently found entirely insensible to the light, the nerve having been paralysed by the injury. Though complaining somewhat of pain, the man seemed to suffer most from fear of blindness, having been unable to see since the receipt of the injury.

The usual application of lint wetted with lime water and sweet oil was made to the face, and the solution of sulphate of morphia in tea-spoonful doses four times daily was given.

On the fourth day, sloughing of the eye-balls was found to be taking place; the linimentum calcis was laid aside, and slippery elm mucilage during the day, and the poultice at night, were substituted. Continued the use of the anodyne and a good diet. 24th. Great restlessness and some delirium. 25th. Succeeded in leaving his bed while sweating profusely, and wandered about his room. 27th. To-day has pneumonia of the right lung, slightly involving the left lung—pulse frequent and feeble. ℞. Hyd. chlo. mit. gr. ½ opii. pulv. gr. ¼ q. s. h.

28th. Percussion dull over the right lung, crepitant rale heard throughout the left lung—loud tubal respiration—says he is unable to breathe—pulse 120 and very feeble. Omit the calomel and opium and substitute ammon carb. gr. v., syr. senegæ f. ss. every two hours—brandy punch, wine-glassful every three hours.

On the 30th, the patient had improved, and from this time the

pneumonia symptoms gradually disappeared. The separation of the slough from the forehead was followed by copious hemorrhage which could only be arrested by tying the temporal artery.

Pus, and destroyed tissues, continued to be discharged from the eye-balls for a length of time. On the 10th of February, he was permitted to sit up;—total destruction of both eyes had now taken place, and a large ulcerated surface of the face, forehead and eye-lids remained. Cicatrization of the ulcers has gradually taken place, and the man is now able to walk abroad, and will probably be soon discharged.

Dislocation of the (tarsal) scaphoid bone.—This somewhat singular accident happened to a large, but pale and sickly man, aged 40, who was brought to the hospital, February 13, 1850. The history was imperfect, but so far as could be learned, the patient, while in the delirium of fever, had leaped from a window about twenty feet high, alighting on "the ball" of the foot. There was a very marked prominence on the upper surface of the foot immediately posterior to the articulation of the first metatarsal bone, and the man complained of pain on attempting any movement of the foot. The integument was tense, but there was no external wound.

An assistant having been directed to secure the leg, reduction was effected by placing the left hand on the foot immediately in advance of the leg, while the right hand firmly grasped the extremity of the metatarsal bones at the same time that the thumb was pressing back the prominent bone. Strong traction having been made, the bone suddenly yielded, slipped into its place with a snap, the patient screamed with pain, and the deformity at once disappeared. A figure-of-eight roller was applied over the foot, and the man closely watched. At the end of twelve hours this was removed, but no increase of swelling existing, it was re-applied. The man remained in the house several weeks under treatment for his febrile affection, but no unpleasant result followed the injury to the foot. At the time of his dismissal he walked with a cane without difficulty.

Paronychia.—Persons with this affection generally do not apply for aid at the hospital until matter has freely formed, has travelled beneath the fascia, destroyed the periosteum, and pro-

duced the death of the bone. Scarcely a week passes that this last result of the neglect of a free opening is not seen. It is believed that this opening can hardly be made too early, for though but little pus may have formed, yet the local depletion thus obtained will prove of benefit. Of whitlows and boils during the summer, there were so many cases as almost to give the affections the character of an epidemic.

Ulcers.—Although most of the cases under care are those of acute disease, it is impossible to avoid receiving a few of the kind here mentioned. The treatment of these, more especially of ulcers of the leg, is so simple as almost to be reducible to a single formula.

After he has been thoroughly cleansed by a warm bath, the patient is put to bed, the leg placed in a fracture box and slightly elevated. Over the ulcer and adjacent parts, a large but light flax-seed meal poultice covered with oiled silk is laid, to be renewed every twelve hours. If the tongue be coated and the bowels constipated, five or six grains of blue mass, followed by castor oil, are given.

For the first day or two, little is effected by the poultice, but the removal of the dirt and hardened discharge which have been allowed to accumulate, and which water alone will scarcely remove. If the ulcer be covered by a slough, the poultice is continued until this has separated; if on the other hand it presents a raw, jagged, indolent, unhealthy appearance, the stick of lunar caustic is thoroughly applied over the whole surface of the sore. In either case, after a few days, the slough separates leaving a healthy granulating surface. The poultice is now laid aside, and lint wetted with lime-water or cold water, is substituted; this is kept wet; if protected by oiled silk it is changed twice, or at least once in twenty-four hours. Once in twenty-four hours the ulcer and parts adjacent are thoroughly washed by a soft sponge with water and castile soap; and, to avoid any danger of contagion, each patient is provided with basin, soap and sponge, to be used for him alone.

If, as is very often the case, the patient should be anemic, or there should exist any vice of constitution, the syrup of the iodide of iron, from five to fifteen drops, or a pill containing of Vallet's proto-carb. of iron gr. iij, sulphate of quinia gr. iij, thrice

daily is prescribed. In cases of syphilitic or scrofulous origin the iodide of potassium or cod liver oil is respectively given. Cicatrization generally goes on steadily. If this be tardy or the granulations become flabby, they are lightly touched with the solid lunar caustic.

At this time pressure is generally made use of; either by means of a few adhesive straps applied in such a way as not to retain the discharge, or a roller alone is firmly placed over the entire limb and its dressing. When the ulcer has cicatrized, the roller is still retained, and the patient directed to wash the part clean with a little soap and water daily. When additional support is deemed necessary, straps of adhesive plaster as recommended by Baynton and Critchett, are applied to the entire limb.

This simple treatment is found sufficient for many unpromising cases. Occasional benefit is derived by alternating with the wet dressings, the cerates of carbonate of zinc, or sub-acetate of lead.

For a year past there has been but little erysipelas in the wards; during the month of February there were a few cases. It has seemed to the writer that in some cases of indolent ulcer, a mild attack of erysipelas rather promoted than retarded cicatrization. There has recently been a tendency to the formation of vesications, of the newly formed cuticle, containing an irritating serum. The evacuation of the fluid and the application of the water dressing has been generally found sufficient to arrest this.

Wounds.—Wound of the throat. A German tailor, aged 21 years, was admitted on the night of December 26, 1850, having a few hours before, while intoxicated, made an incised wound of the throat, with a sharp bread-knife. There was an external wound of between six and seven inches; and on examination it was found that he had cut through the thyro-hyoid membrane, shaved off the corners of the thyroid cartilage, and completely divided the lower part of the pharynx, laying bare on either side the carotid arteries, which could be seen for several inches pulsating in their places.

There was but little hemorrhage, yet the man was in a prostrate condition, from which he speedily reacted under the application of

heat and sinapisms; the little oozing of blood being readily checked by dry lint.

A little water dropped in the mouth passed out at the opening in the throat, and was followed by a violent fit of coughing; the edges of the wound being retracted, when the man was on his back, to the width of four fingers.

On the following morning a secretion of mucus had taken place, which the patient endeavored in vain to bring to his mouth, and which was so copious as to render it necessary to use a sponge attached to a whalebone, to remove it. The treatment determined on and subsequently pursued was as follows: The patient was placed in such a position as most facilitated the escape of the secretion. A piece of gauze, and over it linen spread with cerate, was loosely laid over the wound. Twice daily a large gum catheter was introduced in the œsophagus through the opening in the throat, and barley water or thin arrow root injected. To moisten his mouth a wet linen cloth and small pieces of ice were used.

In three days' time granulations were found to be springing up, and contraction of the external wound had taken place. On the fifth day after the receipt of the injury, the patient was able to swallow small quantities of thin broth, and the catheter was dispensed with.

At the expiration of a fortnight, the secretion having very much diminished, a stout muslin cap with long tapes attached, was fitted to his head, the chin brought down to the chest, and the whole retained by attaching the tapes to the thigh. The wound speedily filled up; in four weeks time he was allowed small pieces of bread, which he swallowed without difficulty.

There now remain two slight points of ulceration, one of which is kept up by the necrosis of a portion of the cartilage, several small pieces of which have come away. The other, now about the size of a fine probe, connects with the larynx; but under the application of sulphate of copper, is closing. He now eats meat without difficulty. Although unable to articulate as loudly as before, he is rapidly regaining his voice.

In this case, the old fashioned method of retaining the divided parts by sutures was entirely avoided, experience having proved it, as is well known, both inefficient and injurious. Rest,

position, the cap, and after a time, gentle traction with adhesive plaster, and the occasional touching of the ulcer with lunar caustic, were the means made use of, with a result highly satisfactory.

JAMES J. LEVICK, Resident Physician.

Pennsylvania Hospital, March, 1851.

BIBLIOGRAPHICAL NOTICES.

The Pharmacopœia of the United States, by authority of the National Medical Convention, held at Washington A. D. 1851. Philadelphia; Lippincott, Grambo & Co., 1851.

This is the fourth issue of our National Pharmacopœia, promulgated on the highest medical authority which exists in this country, a convention formed by representatives, consisting of physicians and pharmaceutists, from all sections of its vast domain. Every portion of the Union is entitled to representation in the formation of this work, and the fault of failure to take part in it lies solely at the door of the medical corporations. The present edition is the third revision.

The history of the Pharmacopœia is, perhaps, familiar only to those who are conversant with the progress of Pharmacy in the United States. More than thirty years ago the necessity of such a work became apparent, and it was determined, by public spirited men of high scientific acquirements, to accomplish it. The difficulties which were encountered and overcome, constitute a part of the records of the time, and may be learned from the medical periodicals then issued. Each succeeding edition has to a greater extent confirmed the ideas entertained of its necessity and importance.

From an examination of the present edition, it is evident that careful labor has been expended, to make it accord with the great progress in medical and pharmaceutic research, which has characterized the last decennial period.

After an historical introduction, which details merely the forma-

tion of the Convention, and the mode in which the revision was effected, we are presented with a preface, containing information highly interesting. We refer to that which pertains to the plan which has been adopted, and to an exposition of the general principles on which it has been founded.

The older members of the profession may recollect that the original work was published in the Latin tongue, that the subsequent edition was in Latin and English, and the next in English only. The present revision is as the last, in English. Much may be said upon both sides of the question, was it expedient to drop the Latinity? In the ancient language of science more of learning and dignity is displayed undoubtedly, but this is lost in the necessary accommodation of expression to the new discoveries and processes which require exposition. Pure classical Latin, the Latin of Celsus, cannot accommodate itself to the hundred requisitions of speech not dreamed of in his philosophy, and such Latin as can at the present time be framed, is a caricature on ancient learning.

The argument has been used, that the Latin is the language of science. It was at one time the language of the learned, but at a time when other languages were in formation, when there existed a necessity for a general medium; the necessity does not exist at present. More, now, can read English than Latin, and write it also, which was not the case when the latter was in vogue. The object of using any language is general utility, and this, with the reasons given, was, with the framers of the Pharmacopœia, conceived to be ample justification for the introduction of our own vernacular. They might have cited precedents in the Codex, the Edinburgh Pharmacopœia, and the late edition of the Dublin.

What is true with respect to common familiar directions for the formation of preparations, is not so with respect to nomenclature. A classical foundation is here most productive of what a nomenclature should be, "simple, expressive, distinctive and convenient." The pages which are devoted to an exposition of the principles adopted in the formation of the nomenclature, are full and explanatory. They should not be perused, but studied.

From the great fulness of the original list, an opportunity has been given of introducing but few additional medicines.

Those added have been cautiously admitted, and consist of such as have, by strong testimony, claims to admission. We notice seventeen such additions. The advance of science and discovery, however, has entailed greater amplification with respect to preparations, and fifty-three new ones have been accordingly introduced; while the medicines dismissed consist of three, and the preparations are two in number. How much more the work embraces than the former issue, may be judged of from the foregoing statements.

Among the articles introduced, we find Aconite Root, Extract of Hemp, Cod Liver Oil, Citrate of Potassa, Nitrate of Lead, as well as some articles long used, but heretofore not having a place in our Pharmacopœia. Upon turning over the list of the materia medica, it will be found that changes have been made in nomenclature, of which it is of consequence that physicians should be aware; thus, for Myroxylon and Tolu, in the former editions, are substituted Balsamum Peruvianum, and Balsamum Tolutanum. This became necessary from the change in the name of the plants affording the articles, which are now regarded as species of Myrospermum. Brominium and Iodinium are here found instead of Brominum and Iodinum, a change made to render the nomenclature uniform with that of the British Colleges. Many other changes of the kind are met with, and in order to avoid a misunderstanding, the old names are placed in brackets alongside of the new. The botanical names appear to have been made generally to conform with the advance of this science, hence the substitution of different generic and specific appellations for some to which the ear had been long accustomed; thus Assafœtida is referred to the Narthex Assafœtida, Colocynth to the Citrullus Colocynthis, Camphor to Camphora Officinarum, Cinnamon to the Cinnamomum Zeylanicum and Aromaticum. The name of only one chemical, so far as we have discovered, is thus changed, and that is Zinci Carbonas to Calamina.

A difficulty has always existed with respect to the strength of nitric acid, which could with difficulty be procured of the old standard, sp. gr. 1.5. To accommodate the chemical manufacturer, the specific gravity of 1.42 has been authorized. A chemical sanction for this is given by Mr. Graham, who states that an acid of the strength adopted, is the "proper nitrate of

water; and of the four atoms of water which it contains, one is combined with the acid as a base, and may be termed basic water, while the other three are in combination with the nitrate of water, and may be termed the constitutional water of that salt."

The introduced preparations are so numerous, that we have not space to enumerate them; a few selected ones will answer our purpose. The Ferri Pulvis occupies an important position, at the present time, among the preparations of iron; this is the reduced oxide of iron by hydrogen, which is sometimes known as *Quevenne's iron*, for an abundant domestic supply of which we are much indebted to Prof. Procter. It is the most effective of the preparations of pure iron. Chloroform, Collodium, Glycerina, Zinci Carbonas Præcipitatus, Arsenici Iodidum are others most prominent.

There is a class of preparations which are entirely new in a Pharmacopœia, that of fluid extracts. These preparations are composed of substances whose active principles can be isolated by the proper solvents, and a concentration of them effected, so as to administer the proper dose in the least bulk. Such are the Fluid Extract of Rhubarb, Fluid Extract of Senna, &c., which are, notwithstanding their elaborate preparation, efficient medicines.

We may, in conclusion, remark, that the edition of 1851 is the most elegant of all the editions which have been given to the public. In paper and typography it far exceeds the issue of 1842; independently of its scientific merit, in this respect, it is a most creditable addition to our medical literature. Our only regret is, that the high price at which it is placed will serve to keep it out of the hands of the profession, rather than to facilitate its introduction where it is most desirable it should be in daily use.

On the Diseases of Menstruation and Ovarian Inflammation, in connection with Sterility, Pelvic Tumors and Affections of the Womb. By EDWARD JOHN TILT, M. D., Physician to the Farrington General Dispensary, and to the Paddington Free Dispensary for the Diseases of Women and Children. "*Omne animal ab ovo.*" New York: J. S. & W. Wood, 1851.

The object of the work of Dr. Tilt is to show how inflammation, by reacting on the ovaries, produces diseases of menstruation, sterility and uterine disease; and although we are, for the most part, inclined to look with suspicion upon the productions of of hobby-riders, we are free to confess, that we have risen from the perusal of this little volume with a deep sense of the indebtedness of the profession to its author for the aid that he has afforded them in clearing away much of the obscurity of uterine pathology.

The work opens with six preliminary questions, followed by a prolegomenon in which the subject of ovarian inflammation is introduced; the confusion relative to its history discussed; its frequency proved by that of inflammatory morbid tumors in the ovaries; the reason for the past neglect of ovarian pathology; the ignorance of ovarian physiology, and the pre-eminence traditionally assigned to the uterus among the organs of reproduction; the difficulty of exploring organs so small and so deeply seated; the similitude of many of the symptoms of sub-acute ovaritis to those of inflammation of the womb; the popular conviction that menstruation is a natural function, and that there is no remedy for whatever evils may attend it; the repugnance of patients to submit to the necessary modes of investigation; the repugnance of physicians to press for it when not imperatively demanded; all of which subjects are treated in a lucid manner by the author. After this comes a sketch of ovarian bibliography, a section on the different ovarian explorations:—by the abdomen, the vagina, the rectum, and the double touch.

The body of the work is divided into nine chapters, of which the first five are occupied in the discussion of sub-acute ovaritis, its causes, symptoms, terminations and treatment; whilst the last four are devoted to acute ovaritis, its causes, diagnosis ter-

minations and treatment. A few extracts will better enable our readers to understand the style and mode of treating the subject, by our author, than any written description of our own.

"SUB-ACUTE OVARITIS.

Syn.—Chronic ovaritis; secondary pelvic inflammation. (Dr. Kennedy.)—Abdominal inflammation.—Menstrual colics.—Amenorrhœa.—Dysmenorrhée hystêralgique. (Géndrin.)—Dysmenorrhœa.—Menorrhagia.—Hysteria.

Def.—Swelling of the ovaria, with increase of heat, and pain upon pressure, accompanied by intermittent or permanent pain or uneasiness in the ovarian region, radiating to the loins and thighs, and producing, according to the constitution of the patient, an arrest of menstruation, or its profuse flow, intense local pain, or hysterical symptoms.

By *sub-acute* inflammation, as distinguished from *acute*, we do not so much imply a difference in the intrinsic nature of the morbid phenomena, as a limitation of the inflammatory action to certain distinct parts of the ovaries, as the ovarian follicle, and to portions of the ovarian tissue so small that they give rise to little swelling, and to no febrile action; and here we may point out, as peculiar properties of the sexual system in women, the liability to inflammation of certain portions of the generative apparatus, in which the others may not participate—a peculiarity to which the ovary is still more liable, on account of its complex structure.

Sub-acute ovaritis, whether primarily developed as such, or supervening on the acute inflammation of the ovaries, is necessarily a chronic disease, from the circumstance of the ovaries being subject to a periodical augmentation of nervous and sanguineous excitement. Chronic ovaritis is always sub-acute; and as sub-acute inflammation of the ovaria is often present without being chronic, we have thought it best to adopt the appellation common to them both, instead of that generally made use of. Sub-acute ovaritis is by far the more common, and, therefore, we will first proceed to its investigation.

It is evident, however, that in the determination of causes, in the symptoms, and in the treatment of these two diseases, we shall find a great similarity, we shall also find that they may pass the one into the other, the sub-acute being exasperated into the acute, while acute ovaritis sometimes becomes sub-acute, or chronic, as it is then generally termed.

We admit, then, two forms of ovaritis—1st, the sub-acute; 2nd, acute ovaritis; and, in attempting for the ovaries what has been so felicitously done for other organs, we will endeavour to show that the groups of symptoms associated under the classic names of amenorrhœa, dysmenorrhœa, menorrhagia, and hysteria, are often the mere symptoms of sub-acute ovaritis.

We stand not alone in this belief. Joseph Frank and Dr. Chester hold the same creed. Dr. Robert Lee is much of the same opinion. Clarus distinctly says, that he considers the disorders of menstruation as the symptoms of chronic ovaritis; and Dr. Rigby strenuously advocates the same doctrine."

Again, in describing the symptoms of sub-acute ovaritis, the author gives the following clear account:

The patient experiences a dull pain in the ovarian region, often imperceptible when she is in a state of repose, but brought on by walking, riding, by any sudden movement, or even by pressure on the side. The pain is also increased by the act of straightening the thigh upon the pelvis, as in the erect posture, by which the integuments are put upon the stretch, and pressure is thus exerted over the part. Some patients are unable to maintain the erect posture without resting the foot of the side affected on a stool, so as to keep the thigh more or less bent upon the pelvis, whereby the integuments, &c., are relaxed. Radiating from the ovarian region, the pains are felt across the loins; they descend towards the thighs and fundament, and are of a dull, dragging, heavy, and sometimes of an overwhelming nature. They are distinguished by the patient from other pains resembling colic, and which depend on uterine contractions, although both species of pain may be experienced at the same time; they are likewise to be distinguished from those *superficial* pains which are caused by reflex nervous action, and which so frequently accompany every species of disorder of the organs of generation. They are, however, seldom so acute as to induce the patient to seek for advice. She may submit to them for years, but should she find them so wearisome to mind and body as to be led to seek advice upon her case, she is frequently treated for uterine disease. This is owing to the opinion, adopted by Hippocrates, and still too implicitly believed, that the uterus is the principal organ of the generative system, and that to the morbid condition of this organ are to be attributed almost all the sufferings of women. Should the patient be married, connexion awakens and renders more or less acute the pains we have described. Ocular inspection, and an attentive manual examination, however, will, in some instances, prove that it is not painful when touched, nor does it present much appearance of disease. In sub-acute ovaritis, the hands placed on the iliac regions can sometimes detect an increase of heat; but these symptoms of ovarian inflammation are overlooked, or attributed to disease of the womb, inflammation of its neck, or to that scape-goat of uterine pathology, only known in England, and called irritable uterus—a disease regarded as neuralgia by some, as a form of dysmenorrhœa by others, and which, having the same symptoms as sub-acute ovaritis, we suppose sometimes to be one of the legionic names of that disease. The late Dr. Ingleby noticed that the descent of the ovaries on the vagina produced in one of his patients all the symptoms of the disease called irritable uterus.

The author then proceeds to show how amenorrhœa, dysmenorrhœa, menorrhagia and hysteria, may be traced to this pathological condition of the ovaries, and sterility and uterine inflammation be secondarily established. We wish that time were allowed us to lay before our readers an extended analysis of this

excellent work. We never regret our circumscribed limits so much as upon occasions like the present; but if what we have presented shall induce any to procure this book, and read for themselves, we promise them that they will find material for thought that may dispel much of the obscurity with which this subject is invested.

Indeed the whole subject of ovarian physiology and pathology is, in the language of Dr. Laycock, "too interesting to require any other introduction to the world than its own merits. In support of this proposition, the philanthropist might observe, that all the best feelings of humanity should urge us to continued effort for the welfare of the sex; the political economist might advance, that the power of a people is indissolubly connected with the physical well-being of its females."* In the reproductive system, the ovaria are the all-important constituents; upon them depend the sexual characteristics, and from their pathological condition springs a train of ills too often as little understood as the physiological condition upon which they are based.

The work of Dr. Tilt ends with the following *conclusion*, expressing the deductions to be derived from the preceding pages.

'How does inflammation, by reacting on the ovaries, produce diseases of menstruation?' This was the last of our introductory questions, and if the reader has carefully followed us in our attempts to solve it, he will have seen that in studying the influence of inflammation on the ovaries, and in describing its peculiar characteristics, we have unavoidably detailed those groups of symptoms generally known as *diseases of menstruation*. We think we have successfully shown that these diseases are often the consequences of structural lesions of the ovaries, being in some instances the immediate result of such structural lesions, while in others, sub-acute ovaritis produces diseases of menstruation by the *induction* of organic lesions in the neck of the womb.

We think the following practical deductions, from our previous enquiries, express some truths respecting diseases which are as frequent as they have been hitherto little understood.

1. That amenorrhœa is often the result of sub-acute ovaritis, sometimes the result of the uterine engorgement which it determines.

2. That dysmenorrhœa is often the result of morbid ovulation, and often a symptom of ovarian peritonitis. That frequently sub-acute ova-

* A treatise on the nervous diseases of women, comprising an inquiry into the nature, causes and treatment of spinal and hysterical disorders, by Thomas Laycock, M. D.

ritis, by determining the inflammation and swelling of the neck of the womb is a mediate cause of dysmenorrhœa: the painful symptoms being, in many instances, produced by the partial closure of the neck of the womb, and the consequent effusion of menstrual secretion into the peritonæum.

3. Acute ovaritis, which, by some unexplained process, disposes the engorged uterus to let the vital fluid run to waste.

4. That sub-acute ovaritis, by inducing cerebro-spinal reflex action, in certain pre-disposed subjects, is the most probable cause of hysteria.

We think we have given a sufficient number of cases to illustrate our views. To corroborate them further, would have required a greater space than could be conveniently comprised within the limits of one volume; but if there be truth in what we have advanced, sufficient has been said to put more able observers on the right track; and if we are wrong, the sooner we conclude the better.

We cordially recommend this little work to our readers.

History of Medical Education and Institutions in the United States, from the first settlement of the British Colonies to the year 1850*; with a chapter on the Present Condition and Wants of the Profession, and the Means necessary for supplying these Wants, and elevating the character and extending the usefulness of the whole Profession.* By N. S. Davis, M. D., Prof. of the Principles and Practice of Medicine in Rush Medical College, &c. &c. &c. Chicago, 1851.

The last chapter of this book, like the postscript of a lady's letter, affords the key to the object with which it was written. We were at a loss for the motive which could have induced the publication of so very dull a réchauffé, (deficient even in the cardinal merit of accuracy,) till some concluding allusions to an institution mentioned in the title page, served to point the moral which we sought, and developed a very ingenious *Annual Announcement* of the "Rush Medical College, located at Chicago, Illinois." With, however, this indirect advertisement of the college, illustrated by the services of Dr. N. S. Davis, in the chair of Principles and Practice of Medicine, we have little concern. But we feel called upon to expose and condemn a very discreditable reduction of the lecture fees, which has been adopted by the Professors of the institution in question.

It appears that the faculty of the Rush Medical College have lowered the expenses of a full course, of seven lectures, to the gross

amount of thirty-five dollars; and Dr. N. S. Davis advocates, or rather threatens a further reduction to twenty-five dollars. The obvious purpose of this proceeding is to underbid the neighboring schools. And a degrading competition is invited, (although we trust the influence of such an institution must be powerless,) fatal to the dignity and efficiency of medical instruction.

We need hardly waste an argument against this most pitiful violation of professional propriety. That its only effect will be to consign the originators of the scheme to merited obscurity, we have every confidence. For we believe that the students will estimate these gentlemen at the value they set upon themselves. But we think it our duty to notice the first movement—no matter how insignificant the quarter in which it may appear—in a course which must drive men of talents and attainments from the control of medical education. The subject will, we are glad to see, be brought before the next meeting of the National Medical Association, which we have no doubt will express itself decidedly in the matter.

Operative Surgery. By FREDERICK C. SKEY, F. R. S. Philadelphia. Blanchard & Lea, 1851. pp. 661.

There is certainly no branch, at least of surgical knowledge, in which we have been more abundantly favored in this country with works of all shapes, sizes and pretensions, in each of the three leading European tongues, than this of operative surgery. It seems to be the alpha and omega of many of the greater as well as the lesser lights of the great chirurgical galaxy. It has too often proved the last as well as the first theme of professional inspiration on both sides of the Atlantic. Indeed, more than one instance might be named among French authorities of note, in which it has been literally the standing labor of love throughout a life time, and yet proved to be only in the course of progress at the close of a career which left it to be carried on, often in the same snail's pace, by some equally voluminous but longer-lived apostle. In view, then, of this ample previous display of skill and learning, we may well pause to enquire into the claims of one who comes to us unheralded by any flourish of

trumpets beyond what is sounded by himself, and supported only by the prestige of his own name and station as an "F. R. S."

It is fair, however, to remember as a matter of course that Mr. Skey has had no part or lot in the reprint now before us; and that he intended solely to address those to whom his high standing as a London practitioner and a member of the Council of the Royal College of Surgeons, as well as assistant surgeon of St. Bartholomew's, had long made him favorably known. In this connection we feel bound to say, that the author has not had the chance which we think should be given him in a reprint; for although the letter press appears to be faithful, and the book generally to have been well gotten up, the illustrations are decidedly inferior to those of the original. In this important particular, at any rate, Mr. Skey as well as his American readers, have strong reason to complain. Without intending in this place to agitate the old vexed and sorely vexing question of rights of authorship, we must say that where an author is "obliged to volunteer," he should at least be presented in the garb in which he had himself chosen to appear. But in thus striking at its shadow we are losing sight of the work itself.

It "was undertaken," says the author, "in compliance with the advice of some professional friends, who equally felt with myself the want of a book on the subject of operative surgery, which might become, not simply a guide to the actual operation, and embrace the practical rules required to justify the appeal to the knife, but would embody, at the same time, such principles as should constitute a permanent guide to the practitioner of Operative Surgery, and without which, all claim to its scientific character is lost."

In these words are unfurled the standard of the book; not very clearly it is true, but still sufficiently so to lead us to look with great satisfaction, not to say confidence, for a treatise embodying principles not less than practice, and establishing the art and mystery of surgery on a higher and broader platform than that of the most skilful employment of mere instruments and apparatus.

"The operating surgeon is not a mechanic, but the agent through whose instrumentality are carried into action the highest principles of scientific medicine, principles demanding an in-

timacy with the soundest physiology. He wields a power more grand, and more critical, and at the same time, more terrible to humanity than the member of any other branch of our profession." "There is no department of medical practice," continues he, "more attractive to the younger members of our profession than that of operative surgery. Its brilliancy, its eclat, its critical influence in the disease, all contribute to this popularity," &c. "Is not this enthusiasm somewhat misapplied? Between the claims to respect of curative and operative surgery, there is no comparison. I venture to say, with all respect to my many superiors in surgical acquirements, that it is the duty of the teacher to expatiate with all the power of his authority on the superiority of the one over the other." Still our author does not seemed disposed to undervalue his operative branch. His great aim, we are informed, is "to fix it on its proper basis," to warn the surgeon "from paths of danger and difficulty" and to test "the question of every operation, *in foro conscientiæ*, before it is undertaken." He has "endeavored, as an English metropolitan surgeon, to carry into execution at least one primary object, viz., to strip the science of Operative Surgery of a false glare," "to check a spirit of reckless experiment, and to repress rather than encourage the resort to the knife as a radical agent."

These passages evince a spirit and design which we cannot too earnestly commend, and we quote them in order to show that the author belongs to the true school, whatever he may be in scholarship, or as a master. Nothing is intimated in the title page, and very little in the preface, of the opportunities and position which are to give Mr. Skey's teaching the necessary weight, but we are soon enlightened on this question in our perusal of the succeeding chapters. The names of Abernethy, Astley Cooper, Lawrence, Brodie, Stanley and others little less distinguished, repeatedly occur as those of his associates in public and private practice; and from one remark we learn that he has enjoyed the advantages of twenty-five years of experience in the practice of St. Bartholomew's Hospital; while in another place we are told that his opportunities have been "as extensive as fall to the lot of most men."

Such an imposing exhibition of his claims together with the fact of his distinction as member of the Council, and more recently

Hunterian orator, of the Royal College of Surgeons, had disposed us to look for at least a respectable fulfilment of the flattering promises of his preface, notwithstanding a damper at its close, in which he vouchsafes the information that the character of his mind "is not attuned to authority, and it has been my practice, no less than my principle in life, to think for myself." But these exalted expectations were not destined to be realized. Disappointment from one end of the book to the other, will well excuse the language of one of his own countrymen, who complains that "instead of new ideas or clear descriptions, which might be recommended to the attention of our readers, we were to meet with nothing better than unmeaning trivialities, interspersed with old exploded notions, and imperfect views of modern improvements."

We do not pretend to assert that there is not a great deal that is very good, and more or less that is actually new, but we seriously doubt whether there is enough of sterling value in the whole to counterbalance the evil influence of what is worse than useless, still less to justify the publication and re-publication of an octavo volume of six hundred and sixty-one closely printed pages.

If it be not the complete and elevated work on the principles and practice of operative surgery in the present state of the science, as we are led to expect by the high sounding professions of the preface, we have a right to take it for some sort of exponent of the precepts and practice now in vogue in the wards of St. Bartholomew, if not in the English metropolis itself. Although Mr. Skey does not "profess to give the multitudinous opinions of other men," he "has not withheld them." "I have quoted," says he, "the opinions entertained by most of the eminent members of the surgical profession, *so far as a general intercourse and an extensive acquaintance have enabled me to command it.*"* And yet he has enjoyed the rare benefit of twenty-five years of experience in St. Bartholomew's hospital, and of practice in the great city of London along with the first surgeons of the age, and in close proximity to those of Dublin, Edinburgh, and of Paris, not to mention the not less renowned practitioners of other parts

*The italics are our own.

of Europe and of this country, as well as throughout the provinces of the United Kingdom! The idle excuse that his mind is "not attuned to authority," affords but paltry satisfaction to the disappointed student who has sought his work in the vain hope of learning, from the very highest sources, a great deal of the true philosophy of practical science—a philosophy untrammeled by authority indeed, but none the less broadly established on the only true and sure foundation of enlarged experience, and equally enlarged and discriminating study of the experience of others. There is much in Mr. Skey's book that is better told and illustrated in books of far humbler pretensions, and prepared by younger men; and we regret to say that, considering all the circumstances of its preparation, there is comparatively little else that is not almost as objectionable as it is peculiar.

In the course of the first two chapters, which are devoted to general observations and the management of wounds, we find, among other things, the statement of the fact that the records of St. Bartholomew's Hospital point to the successful administration of anæsthetic agents in upwards of nine thousand cases; "in not one of which, including the aged and the young, the healthy and infirm, and the asthmatic, has its employment left a stain on its character as an innocuous agent for good." This is strong evidence in its favor, and is not without an equally decided effect on the author's practice, as shown in his constant recommendation of it in nearly all the operations described, and especially the most painful, such as operations on dead bone, for the reduction of dislocation and other similarly painful and tedious in character, or requiring rest and relaxation. The agent he employs is chloroform, gradually administered with free access of fresh air as a diluent during inhalation, the cambric handkerchief being used in preference to the metallic inhalers.

Passing over some peculiar views in regard to the employment of blunt edges and silver knives in certain operations, as well as other 'notions' still more singular in regard to sutures on the face, we come to chapter third, on Dislocations. This whole subject is dispatched in some sixty-five pages. His advice on this topic, in the main, is such as would be approved of here, but his precept in regard to old luxations, does not appear to be either precise or safe according to the

prevailing doctrines in this country. He admits, for instance, an increase of difficulty with the protraction of the term of dislocation but does not consider any serious obstacle to be presented "even though many days or even weeks have expired since the occurrence of the accident." He would not limit the time for the attempt at reduction, "unless we carry the question at once into a period of nine months or a year or more." This is, to say the least of it, a very elastic and uncertain kind of rule. Nor is he disposed to regard as important the risk of lacerating the new formed adhesions around a displaced joint. He cannot understand the danger in such cases, and recommends, that "to effect the complete laceration of these adhesions the limb should be subjected, under the influence of chloroform, to powerful extension, and should be forcibly rotated in all directions." According to his account "the immense experience of Sir Astley Cooper has failed to furnish a single case of serious injury consequent on the attempt to reduce any form of dislocation." If our author had taken the trouble to consult a few of the "multitudinous opinions of other men," a little further from his immediate neighborhood, he might have met with more than one authenticated instance of serious results that would teach a striking lesson of prudence in this matter of long standing dislocation.

Bandages and fractures are hastily despatched in two short chapters, and then followed by a pretty full consideration of aneurisms and the treatment of wounded and diseased blood vessels. In this portion of his work he has lost a capital opportunity to bring his book to the present state of progress, by a full discussion of the treatment by compression. We would have been glad to hear something of practical results, so far as they had been observed in the wards of St. Bartholomew, if no where else; and, at all events, we might have been favored with an exhibition of the apparatus most approved by Bellingham and others, together with some sort of appreciation of its value. He appears to know no more about this vitally important question than every well-informed surgeon could tell us four or five years ago, and presents us with a figure of a "tourniquet" that has long since given place to better things among those who are familiar with the improvements of the day.

Chapter 8th gives a very brief view of varicose veins, and

their treatment. It is useful in spite of its meagreness, on account of the operative procedure recommended, and justly, as we think, in preference to all others. Every one is aware of the uncertainty as well as great danger of the different cutting and deligating operations for the removal of this distressing infirmity.—"But," says Mr. Skey, "no danger attaches to the destruction of the saphena and its branches, by means of escharotics, which may be employed in the form of caustic issues with all confidence for the removal of varicose veins of the leg. Having tested this practice for many years, and adopted it largely in the out-patient ward of St. Bartholomew's Hospital, and also repeatedly in private practice, I can unhesitatingly say that the treatment is both efficient and safe." We are disposed, on the strength of some experience, to agree with him fully in his estimate of the superior advantages, on every account, of the caustic treatment of varicose veins. We have seen it extensively employed in this city and elsewhere, and always with more satisfactory results than we have been able to discover in the use of any other therapeutic means.

Next in order comes an interesting, but not in any way remarkable chapter on Amputation. Of this, it will suffice to say that the circular is preferred to the flap operation, although the flap operations are duly considered and described. Following Amputations we find a succession of short articles on various topics of greater or less interest, treated of without much regard to order or connection.

Chapter 15th is occupied with hernia, and presents us with as useful a history of the most important points as could be expected in the compass of twenty-nine octavo pages.

In chapters 16 and 17, respectively, we meet with a very cursory account of operations on the external organs of generation in the male, and operations on the male perineum and about the anus. After these, comes a somewhat elaborate discussion and description of the "operations of lithotomy and lithotrity." He takes "lithotrity as the rule, and the cutting operation as the exception;" and in selecting a case suitable in all its bearings for the former, he would require the following conditions: "First well developed manhood. Second, a healthy and readily dilata-

ble urethra. Third, a bladder free from irritation, and capable of retaining at least six ounces of urine; a condition which infers the absence of prostatic disease. Fourth, a tonic condition of the nervous system; and Fifth, the presence of a stone of such dimensions as to be readily embraced by the screw of the lithotrite." What is meant precisely, by the screw of the lithotrite we are at a loss to understand; for although the operation described and advocated is evidently the crushing one, and the instrument therefore lithotriptic, we are still in the dark as to whether in reality the instrument he uses is not as obsolete as the name he gives it. His history of the different instruments employed in the cutting operation is much more full and satisfactory. He advocates the completion of the opening into the bladder with the knife alone.

Lateral curvature is the next topic chosen to enlarge upon, and one which appears to have been a favorite with our author. His suggestions in relation to its treatment are interesting and instructive.

Four chapters follow on a variety of subjects of greater or less importance, including one on the Cæsarian Section and Ovariotomy. These are succeeded by four others upon the different operations on the eye, which, with a useful index to instruments and apparatus required for special operations, terminate the volume.

A pretty thorough examination of the twenty-eight chapters, briefly analyzed above, has brought many matters of record and opinion to our notice, which might be worth especial mention, either pro or con. But we feel under no obligations to the author, to occupy the attention of our readers any longer with such an unattractive and unprofitable topic,—and while we have considered it our sacred duty conscientiously to warn the American practitioner against the influence which the known position of the writer must inevitably secure to him in many places, we must express our unfeigned regret at the necessity which has obliged us to receive in such a manner, one to whom otherwise we would have been delighted to extend a grateful welcome.

Report of the Pennsylvania Hospital for the Insane, for the year 1850. By THOMAS S. KIRKBRIDE, M. D., Physician to the Institution. Philadelphia, 1851.

Dr. Kirkbride very justly observes, in the Report before us, that "the general circulation of Hospital reports, containing the results of judicious treatment, has done more to enlighten the public mind in reference to insanity, to stimulate and give proper direction to the efforts of philanthropists, and eventually lead to a liberal provision for the wants of the insane generally, than all other means combined." Of the value of his own contributions during the ten years the Pennsylvania Hospital for the Insane has been in operation under his care, it is hardly necessary for us to speak. They are identified with the history of the subject, and are appreciated both abroad and at home.

The present report, which includes a period of ten years, presents a more extended analysis of the statistical tables collected in the Institution, than Dr. Kirkbride has heretofore attempted. The various facts connected with the causes and treatment of insanity, as afforded by the Institution, have been grouped under fourteen heads. They show:—1. The number and sex of the admissions and discharges. 2. The ages of the patients. 3. The occupations of the male patients. 4. The occupations of of the female patients. 5. The number of single, married, widowers, and widows. 6. The places of nativity of the patients. 7. Their residences. 8. The supposed causes of their insanity. 9. The ages at which their insanity first appeared. 10. The different forms of their insanity. 11. The duration of the disease at the time of admission. 12. The number of the attacks. 13. The state of the patients who have been discharged or died. 14. The number of admissions, discharges, cures, and deaths, in each month since the opening of the Hospital.

Many results of the highest interest are afforded by these statistics,—very satisfactorily establishing the value of the application of tabulation to the subject of insanity. Indeed, as Dr. Kirkbride judiciously argues, "there seems to be no sound reason why the statistics of insanity may not possess as much certainty as those of most other maladies; and the fact that an

undue importance has occasionally been given to them, and erroneous deductions drawn from those having reference to a small number of cases, and for short periods of time, as we all know, has frequently occurred, ought scarcely to be considered a sufficient apology for neglecting to note in this form all the circumstances that inquirers may consider as possessing general interest."

In looking over Dr. Kirkbride's comments on the table showing the supposed causes of insanity, our attention was arrested by his allusions to the influence of opium and tobacco in this respect. The subject of the effects of the use of tobacco having been within a short period noticed in our columns, it will probably interest our readers to learn Dr. Kirkbride's views as regards its agency in producing insanity.

"Two cases in men, and five in women, are reported as caused by the use of opium, and four in men as caused by the use of tobacco. In reference to the influence of these articles in producing insanity in the cases referrred to, there did not seem to be any just ground for doubt. Opium is much more used among females than males, and its effects upon the mind, no less than upon the body, are of a most injurious character. The use of tobacco, which is much more restricted to men, has, in many individuals, a most striking effect on the nervous system, and its general use in the community is productive of more serious results than are commonly supposed. Its excessive use is apt to develop gastric derangement and disorders of the nervous system, and renders active other influences that might have been harmless. In many chronic and recent cases of insanity, the effects of a temporary indulgence in it are so striking as to attract the attention of all who are habitually about the patients. After no inconsiderable amount of experience in reference to this article, I have no hesitation in saying that I have never seen anything more than a temporary annoyance, such as would occur in giving up any confirmed habit, result from its entire discontinuance, and by that course alone the complete re-establishment of impaired health, has often been produced."

In connection with the general arrangements of the Institution, it may be well to mention, for the benefit of such of our readers as are connected with hospitals and other public institutions, that Dr. Kirkbride speaks very decidedly in favor of the use of steam for the purposes of heat and ventilation.

"The fixtures for heating several of the wards of the South Wing by steam, have been steadily in use, and continue to give entire satisfaction."

And he adds :—

"Heating by steam or hot water in connection with a forced ventilation, has now been so fully tested under various circumstances, in our highest latitudes, and its great superiority over every other mode now known, so clearly demonstrated, that hereafter public opinion will hardly justify those to whom is intrusted the high responsibility of providing buildings for the permanent accommodation of large numbers, whether in sickness or health, for adopting any of the very imperfect kinds of fixtures heretofore employed."

The Report presents, in conclusion, some interesting particulars in connection with the Pennsylvania Hospital.

"It is now just about a century since the Pennsylvania Hospital, the pioneer institution for the insane in America, was incorporated by the Provincial Assembly, and opened for the reception of patients. With the exception of the Friends' Asylum at Frankford, established in 1817, and the Insane Department of the Philadelphia Almshouse in Blockley, (which a few years since, for the first time, took rank as a curative establishment,) the Pennsylvania Hospital has been the only institution in the State to which any class of her citizens could resort for the treatment of insanity, and it was strictly the only one which offered relief from this malady without cost to the indigent of Pennsylvania.

From the foundation of the Pennsylvania Hospital in 1751 to the present time, 6062 insane persons have been admitted and treated in its wards; of these more than 1000 were poor, who received every care and attention without charge of any kind, and of whom a large proportion were restored to their families in perfect health, and many others in various states of improvement; the number of this class under treatment being only limited to the income of the Institution."

Thermal Ventilation, and other Sanitary Improvements, applicable to Public Buildings, and recently adopted at the New York Hospital: A Discourse Delivered at the Hospital, February 8th, 1851. By JOHN WATSON, M. D.

The New York Hospital having lately undergone various alterations with a view to the introduction of every available sanitary improvement, Dr. Watson has been at the pains to publish a detailed account of them, which will be read with great interest by all whose attention has been specially drawn to the subject. One of the chief improvements introduced into the hospital, is the steam apparatus for the purposes of heat and ventilation, which has been for some time so successfully in use at our Alms-House Hospital and at the Pennsylvania Hospital for the Insane.

Proceedings of the Medical Association of the State of Alabama, begun and held in the City of Mobile, December 10—14, 1850. With an Appendix. Mobile, 1851.

Among the published transactions of the various State Medical Associations, the volume lately issued by the Medical Association of the state of Alabama deserves a high place. The physicians of that state were among the first to respond to the suggestion of the National Medical Association, in organizing a State Medical Association, and they have maintained the effort with creditable zeal and ability. The volume before us presents a large number of interesting scientific papers, while the debates and occasional addresses are distinguished by the highest tone in medical politics and ethics. The proceedings comprise a very complete history of the diseases of a considerable portion of the state of Alabama, valuable notices of the medical botany of many counties, with reports of several remarkable and interesting cases We have beside an annual address from Dr. Lopez, and a valedictory address from Dr. Lavender, who successively filled the chair of the Association.

We feel that the thanks of the profession generally, are due to the members of the Alabama Association for the spirited manner in which they have carried out their state organization—particularly to Drs. Lopez, Lavender, Percival, L. H. and W. H. Anderson, D. R. Smith, Welch, Wooten, Mason, and Reese, for the valuable contributions with which they have enrichod the volume of "Proceedings."

THE MEDICAL EXAMINER.

PHILADELPHIA, MAY, 1851.

RANK OF MEDICAL OFFICERS IN THE U. S. ARMY.

We have before us the "Report of a board of army officers appointed by the President upon so much of the resolution of the House of Representatives of July 18, 1850, as relates to rank and command within the army," dated Washington, November 27, 1850. The board consisted of Major General Winfield Scott; Brevet Major Generals Th. S. Jessup and John E. Wool; Colonel J. B. Crane; Lieut. Col. E. A. Hitchcock; Deputy Paymaster General Benj. F. Larned; and Surgeon T. G. Mower.

The report of the board is in form of a bill, or project of a law. The first section sets down what shall be the "titles and grades of army rank, or rank in the line of the army," which are in the following order: viz. 1, Major General; 2, Brigadier General; 3, Colonel; 4, Lieutenant Colonel; 5, Major; 6, Captain; 7, First Lieutenant; 8, Second Lieutenant; 9, Cadet; 10, Ordnance Sergeant; 11, Sergeant Major; 12, Quartermaster Sergeant; 13, Principal Musician; 14, Orderly, or First Sergeant; 15, Sergeant; and 16, Corporal. The last is entitled to command all privates, musicians, artificers and the like. This section provides that all persons attached to the army who are not commissioned, shall be subordinate to any commissioned officer of any of the staff corps, including of course, officers of the medical and pay department, though "without army rank."

According to this scheme, the line of the army consists of sixteen official grades, from Corporal to Major General. But the line of the army could not sustain itself alone; it requires the aid of a class of military men, called the staff, which consists of several distinct departments and corps. The commissioned officers of the line of the army, (attached to regiments of dragoons, mounted riflemen, artillery and infantry,) at the close of the year 1849, numbered 585; and at the same time the staff of the army included 324 commissioned officers. These figures show the relative proportion which the line and staff bear to each other. The general staff of the army consists of the Adjutant General's department; the inspector's department; judge advocate of the army; quarter master general's department; commissary general's depart-

ment; medical department; pay department; besides the corps of engineers, and that of the topographical engineers; the ordnance department and military store-keepers. The special duties of these several departments are all essential to the efficiency of the line: they embrace rolls, registers of service, feeding, clothing, lodging, paying; curing when sick or hurt; surveying routes and camp grounds; building forts and barracks, and taking care of depots of military stores of various kinds, &c. &c.

These staff departments are constituted of several grades; and each is organized in itself after the manner of the line of the army: for example, the corps of engineers consists of six grades of commissioned officers, namely, colonel; lieutenant colonel; major; captain; first lieutenant; second lieutenant. These titles and grades in the engineer staff, (composed in fact of architects whose business is to build for military or warlike objects,) bear a similar relation to each other, subordinately, as the same titles and grades in the line of the army. In a word, the rank of an engineer amongst engineers is precisely the same thing, as the rank of a line officer amongst officers of the line, in its meaning and application. But as the term rank has come to mean in military communities, relative position as well as the degree or limits of authority an officer may exercise; and as it would lead to confusion, were it admitted that grade and title impart power which may be exercised, at the will of the officer, for example, either as a major of infantry, or of artillery, or of dragoons, or of engineers, according to circumstances, different qualities of rank have been established. The position of an officer in the line of the army is termed his *lineal* rank; the position of an officer in the engineer, or other corps is termed his *staff*-rank. It is established that a major of engineers (military architects), cannot in virtue of his title of major, exercise authority as a major in the artillery, or infantry, or in any department of the line, or staff; but it is also understood that no major whose commission is junior in the line, can control the major of engineers, except under the special instructions of a common superior. Yet in point of military respectability the title of "major" is the same, whether used in the line or staff; a major of engineers is on a level with a major of artillery, or a major of any other arm or branch of the army. The authority which enures to title and grade is restricted to the department or corps to which they belong. But all men in an army are military men, no matter what may be their vocation; a military tone, a military spirit, a military sensibility or sense are equally diffused and common to all, in the same manner as a Christian sensibility or perceptivity pervades and is common among all civil communities or societies in the United States. No mat-

ter what may be his trade or vocation, every citizen of our country is assumed to be a Christian; and so, every member of an army, no matter what may be his special employment, is presumed to be a *militaire.*

But this report strives to except from the rule and to deny that physicians, who are members of the army, can have military tone or perceptivity. The line officers would have physicians in the army placed in a *caste* position relatively to the army, such as Jews, or infidels, commonly held in strict Roman Catholic societies or countries. The science of medicine seems, in the opinion of the line, to degrade its votaries, much in the same manner as the Jewish creed degrades its votaries in the estimation of many Christians. It is against this purely *caste* distinction that medical officers contend; they insist that a major in the medical department is entitled to as much respect and consideration in the army and out of it, as a major in the engineer department, subsistence department, clothing department or any other, and that they are not disqualified, in consequence of exercising the profession of medicine and surgery, from participating in the general and common military spirit which pervades the army. They contend that the profession of medicine does not disqualify them from serving on boards, councils, or courts-martial; but they are willing nevertheless to be exempt from such duties, in the same manner that magistrates, judges, physicians, counsellors at law, and officers of the army and navy, and some others in civil life, are exempt from serving on juries. They contend that surgeons in the army are military men, and that their commands are therefore military; because *military command* consists essentially in a legal right to exact obedience, under the penalties provided by military laws, without regard to the nature of the act ordered to be done. On this principle they claim rank, which is defined to be the relative position of the members of a military community to each other. We have already explained the meaning of the terms lineal rank and staff rank. There is still another quality of rank, termed *assimilated* rank, which is defined to be the relative position of members of the staff corps to officers of the line, and to officers of different staff corps.

The report of the board before us, in the first section, defines the lineal rank of the army, and, in the second section, admits staff and assimilated rank for all except the medical and pay departments. The seventh section proposes to fill vacancies, or in a word to make promotions in certain staff corps by selections from the whole army; but the proposition has been significantly rebuked by a clause in the law recently enacted, making appropriations for the support of the army, which provides "That all

promotions in the staff departments or corps shall be made as in the other corps of the army."

The fifth section proposes that officers of the medical and pay departments shall be subordinate, shall always be virtually of inferior rank, to any line officer accidentally in command of a post or detachment, no matter what may be the grade of such line officer. No such exception is proposed against the rank of officers of any other staff department of the army. The assimilated rank of commissaries, quarter masters, engineers, &c., is never made contingent in its operation on circumstance; a major of the quartermaster's or engineer's department remains a major, although the command of a post or detachment may have devolved upon a captain or first lieutenant of the line. It is not perceived why an invidious distinction should be made against medical officers in this respect.

The ninth and last section proposes to repeal the laws which confer rank on medical officers, but not to deprive those now in service of their present rank; all officers hereafter appointed in the medical department of the army are to be commissioned without any rank or position whatever. If the medical officers now in the army can retain the rank which the law gives them without injury or inconvenience to the service, it is absurd to suppose that those hereafter appointed cannot enjoy the same rank, without risk of detriment to the discipline of the army.

For the various propositions of this report, no reasons whatever are assigned; but we have the protests of the staff-officers against them. That of Surgeon Mower speaks for itself, and is commended to the special attention of the medical profession generally, the members of which should give their influence in obtaining and securing for their brethren in the army and navy a just position. It is to be hoped that no physician in the United States will cast his vote in favor of any candidate for the presidency or other political office, who is known to be hostile to or prejudiced against the just claims of medical men to be protected by law, like other citizens. The mental capacity and impartiality of a man may be doubted, if he is found to regard physicians as men of inferior caste; or less respectable on account of their vocation.

If the opposition to assigning medical officers rank in the army and navy were based upon any sound reason, there would be no difficulty in stating such reason or argument. But thus far not a single argument of any weight whatever has been brought forward by gentlemen of the line, either of the army or navy. The whole of the opposition rests on prejudice against the medical profession, more than against its members who generally enjoy a high degree of social popularity in both services, in

spite of the vocation, which would be more justly appreciated by the masses if it in any manner represented property, or value. If medical prescription saved the patient from the expenditure of dollars, instead of relieving him from pain or rescuing him from death, its worth would be more palpable, and it would be cheerfully paid for at full price.

WASHINGTON, D. C., *November* 27, 1850.

The undersigned, dissenting from the views of a majority of his colleagues, as indicated in several sections proposed for enactment, feels constrained to enter this his protest against them, and respectfully to request that it may accompany the report of the majority of the army board.

He dissents from the proposition to allow staff officers to assume command of troops in any case where there is an officer of the line of the army present for duty, unless such staff officer be especially assigned to such command by the President of the United States, or by a general officer commanding in the field—this, on the ground that the staff officer should not be diverted from his appropriate duties, that his pay and emoluments are superior to those of the line officer, and that this inequality would be still further increased by the allowances incidental to his entering on a command.

He dissents also from the last clause of section 5, which is in the following words: "And when they (officers of the medical and pay departments) chance to be at a post or with a detachment commanded by a junior officer, they shall not absent themselves from the post or detachment, except in urgent cases, and then not without notifying the commanding officer, though of inferiorrank, of their intention so to do;" because it would unnecessarily establish an invidious distinction between certain staff departments and corps, and other co-ordinate staff departments, to wit: the medical and pay, and would, as a necessary consequence, create an odious *caste* among the officers composing the staff of the army. Under existing law and regulations, an officer of the staff, to whatever corps he may belong, cannot assume the command of a body of troops over an officer of the line, "except by special assignment;" nor can any officer of inferior rank in the line command his senior in the staff. In this last respect the officers of all the staff departments and corps enjoy the same immunity, and are upon an equal footing. The clause referred to not only breaks down this just equality between the officers of the staff of the army, but singles out those of the medical and pay departments as the special exception to the rule. Moreover, while it is proposed to remove the legal and executive disabilities to which other staff departments and corps are subjected, and even to extend their privileges, the strictly *protective* rank of officers of the medical and pay departments has been so hampered that they are prohibited from a walk out of camp or garrison "without notifying the commanding officer, though of inferior rank, of their intention so to do."

If any conflicting case has occurred which to the minds of the ma

jority of the board renders it necessary that the laws conferring *protective* rank upon the officers of the medical and pay departments should be thus restricted, it should be borne in mind that the responsibility of two unaccommodating tempers ought not to be thrown upon one, and that the difficulties resulting therefrom, more imaginary than real, should not be charged to him alone.

Whatever may be the principles on which they are based, the working of no human institution is perfect; nor is a military organization which aims at utopian results an exception. It may be worthy of consideration, therefore, whether a better incentive to the performance of their respective duties by the officers of the medical and pay departments (already subject to all the rules and articles of war, and to all the liabilities and penalties which they impose) could not be found in a high moral and professional principle, rather than in subjecting them to invidious and humiliating distinctions, by restricting their movements and their absence from post, even for half an hour, without previous notice to the commanding officer, though of inferior rank.

The proposition to make, contrary to existing laws, a senior medical officer virtually subordinate to a junior officer of the other branches of service who may chance to be in command at a post or station, is based on theoretical rather than on practical principles. Their duties being altogether distinct, there is actually no necessity for the one interfering with the other; and it may be remarked that the less this is done the better is it for the interest of the service. Experience may be confidently appealed to to prove that the medical officer is seldom interfered with by a commanding officer of well-regulated mind and of experience. And, in illustration, I may state that, previous to the present organization of the medical department, I served for a period of six years as surgeon to the 6th regiment of infantry, commanded by Colonel (Brigadier General) Atkinson, confessedly one of the best disciplinarians of the army, and, without any solicitation on my part, he voluntarily extended to me the privilege of absenting myself from post temporarily at my own discretion, on the practical and common-sense ground that I could best judge when my services with the command could be spared, and with the understanding that I was held strictly responsible for the performance of my appropriate duties. It gives me pleasure to add the testimony of one of the members of this board, an experienced and successful commander, that a similar practice obtained in his last command.

In determining the military privileges of the officers of the different staff departments and corps relatively with those of the line of the army, there is a manifest propriety in inquiring which of the former is more invariably associated on duty with the latter in garrison and camp, and most participates with them in the hardships and privations incident to the military service. Without hazard of contradiction, it is confidently asserted that it is the *medical department* of the army. On the field of battle, too, where blows are dealt, but cannot consistently with duty

and professional engagements be returned, who are more exposed to the missiles of the enemy than the medical officer ?*

He protests also against section 9, which not only withholds all manner of rank from future medical appointments, dooming them to military outlawry, but likewise places, an impenetrable barrier between them and their professional brethren now in the department. It is vouchsafed to the latter that they may retain the humble rank they now enjoy—diluted and qualified, to be sure ; but for the former there is no ray of hope afforded : they must enter the department, if their pride will allow them to seek the service, a degraded *caste*, not merely among the officers of the line and of the privileged staff corps, but also in their own branch of the service.

The last clause of section 8 of an act approved February 11th, 1847, provides that the rank of the officers of the medical department of the army shall be arranged upon the same basis which at present determines their pay and emoluments : "*Provided*, That the medical officers shall not, in virtue of such rank, be entitled to command in the line, or other staff departments, of the army." This clause, which it is proposed by section 9 to repeal with reference to all future appointments to the medical department, allows only a modified or protective rank to a class of officers confessedly as select and as meritorious as any other in the army. Previously to its enactment, it will be recollected what was the humiliating position assigned to the officers of the medical staff by paragraph 5, general regulations for 1841. Under this paragraph, a medical officer of twenty years' service might be (and frequently was) required to yield precedence on courts martial and boards to a junior officer, perhaps a brevet lieutenant. To obviate a contingency so humiliating to the officers of the medical department and to give them a fixed position which would not be subject to the *fluctuating changes of army regulations*, a legal provision was asked for and obtained. Under its benign operation and the fostering care of

* *Number of officers of the staff of the regular army killed, wounded, and died of wounds in the several conflicts during the war with Mexico, derived from the Adjutant General's report to the Secretary of War.*

	Killed.	Wounded.	Died of Wounds.
Adjutant general's department,	1	0	0
Inspector general's department,	0	0	0
Quartermaster general's department,	1	0	0
Subsistence department,	0	0	0
Pay department,	0	0	0
Medical department,	0	2	1
Corps of Engineers,	0	6	0
Corps of topographical engineers,	0	3	1
Ordnance department,	0	2	0

In addition to the foregoing, *two* officers of the "general staff" are reported to have been wounded in the battle of Buena Vista ; but it is not specified whether they were *general* or *staff officers*, and, if the latter, to what particular department or corps they belonged.

the government, aided by the salutary restrictions guarding appointments to the medical department, it has attained an eminence in personal and professional standing alike beneficial to the army and creditable to themselves. The young professional *élite* of the country have been attracted to the department, and will continue to be so as long as they shall be assured that their professional and personal merit shall be properly appreciated in the military service.

Then why this retrograde movement, and why jeopard the ability for usefulness to the army, which the medical department now possesses? In the name of humanity, the undersigned humbly trusts that no act may be done tending to lower the standard of professional excellence now happily existing in the medical ranks of the army.

T. G. Mower, Surgeon United States Army.

NASHVILLE JOURNAL OF MEDICINE AND SURGERY.

We have just received the first number of this new aspirant for professional favor, edited by Professor Bowling, and extend to it the right hand of fellowship with our best wishes for its success. We would call the attention of the editor to an article, in the January number of the American Journal of Medical Sciences, on the cod liver oil by *Dr. J. J. Levick* of this city; and whilst we do not desire in the least degree to underrate the valuable contribution of Dr. Yandell, which appears in this first number, we would claim for our townsman "the honor of being the first to convey to the medical public of this country, a detailed and scientific account of the GREAT REMEDY in tuberculous disease." In the edition of Dr. Gerhard's treatise on the diseases of the chest, published in 1850, will also be found the author's experience in its use in the Pennsylvania Hospital in tuberculous disease. "Suum cuique tributo."

MEDICAL NEWS.

NEW HOSPITAL.—It is generally understood that the additional hospital accommodation, which has been so long needed in Philadelphia, is about to be supplied under the auspices of the Protestant Episcopal Church—and upon the most liberal organization, "to be open to every creed, country, and color."

DR. ELISHA BARTLETT has resigned the Professorship of the Institutes and Practice of Medicine in the New York University, which he has filled during the past year.

DR. THOMAS REYBURN has resigned the Professorship of Materia Medica and Therapeutics in the Medical department of the St. Louis University.

LIST OF COLLEGES, CLASSES AND GRADUATES FOR 1851.

	Class.	Graduates.
Jefferson Medical College,	504	227
University of Pennsylvania,	466	167
University of New-York,	411	116
N. York College of Physicians and Surgeons,	230	56
New-York Medical College,	40	12
Western Reserve College,	202	
Starling Medical College,	125	35
Castleton Medical College (2 sessions,)	153	64
Philadelphia College of Medicine (2 sessions,)	244	72
Pennsylvania Medical College,		36
Washington University of Baltimore,		13
Yale College,		11
Harvard University,		10
Iowa University,		10
University of Virginia,	93	24
Geneva Medical Institution,	101	
University of Buffalo,	115	30
Albany Medical College,	93	
Philadelphia College of Pharmacy,	82	19
Medical College of Georgia,	159	50
Richmond Medical College,		26
Baltimore College of Dental Surgery,		17
University of Maryland,		45
Ohio Medical College,	180	59
University of Missouri,		33
Louisiana Medical College,		37

N. Y. Med. Gaz.

Among the Original Communications in this number, will be found a reprint, from the American Journal of Medical Sciences, on the subject of establishing a lectureship on Dental Surgery in our Medical Schools, from the pen of Dr. Gardette, an eminent and highly educated practitioner in this department of Surgery in this city. We recommend it to the careful consideration of "those in authority."

AN ACT FOR THE REGISTRATION of Births, Marriages, and Deaths, was passed by the Legislature of Pennsylvania, at the session just terminated.

THE NEW JERSEY MEDICAL REPORTER, one of our most acceptable exchanges, will hereafter be issued monthly instead of quarterly as heretofore.

DISCOURAGEMENT OF VICIOUS ADVERTISEMENTS.—A Society has been formed in England, called "The Union for the Discouragement of Vicious Advertisements," which is designed to resist, and if possible do away with the disgusting parade of filthy advertisements with which the newspapers teem. This evil cries aloud for reform, no less in our own country than in England, and can be efficiently counteracted only by concentration and organization of effort. Will not some of the right-minded and public-spirited among us move in the matter?

A PENSION of £100 per annum, on the Queen's Civil List, has been conferred on Mrs. LISTON, the widow of the late ROBERT LISTON, Esq., the eminent Surgeon.

HOSPITAL FOR SICK CHILDREN, IN LONDON.—A number of distinguished noblemen and gentlemen in London, have taken in hand the organization of an hospital exclusively for sick children, "having the threefold object of affording relief to the poor, of promoting the advancement of medical knowledge, and of training up women to be efficient children's nurses." Such an institution is no less called for in Philadelphia, and we believe that proper effort is only wanting to commend so excellent an object to the action of the benevolent among us.

Dr. H. G. CLARK, City Physician, of Boston, has been appointed one of the Surgeons of the Massachusetts General Hospital, in place of Dr. George Hayward, resigned.

DR. FRANCIS GURNEY SMITH has been appointed one of the Physicians of the St. Joseph's Hospital, Philadelphia, in place of Dr. S. Jackson resigned.

USE OF ANÆSTHETIC AGENTS IN ANCIENT CHINA.—Stanislas Julian has found, in examining the Chinese books in the National Library at Paris, the proof that the Chinese have been long acquainted with the use of anæsthetic agents during surgical operations. The extract which he gives is from a book published about the commencement of the sixteenth century, in fifty vols. quarto, and entitled "Kow-Kin-i-tong," "General account of Ancient and Modern Medicine," and refers to the practice of a celebrated physician, Ho-a-tho, who flourished between the years 220 and 230 of our era. It states, when about to perform certain painful

operations, "he gave the patient a preparation of hemp" (hachich,) and that at the end of a few moments "he became as if he had been drunk or deprived of life." After a certain number of days the patient was cured, without having experienced the slightest pain during the operation.—*Edin. Phil. Journ.*

THE SALE OF ARSENIC.—A bill to regulate the sale of arsenic has been introduced by the Ministry in the English Parliament, and will doubtless pass. It declares that the unrestricted sale of arsenic facilitates the commission of crime. The bill provides, that on every sale, particulars of the sale shall be entered by the seller in a book before the delivery of the arsenic, and every such entry is to be signed by the person selling the same. Any person selling arsenic, save as authorized in this bill, and every person giving false information to obtain arsenic, are to be summarily convicted before magistrates, and to be liable to a penalty not exceeding £20. The bill is not to prevent the sale of arsenic under a medical prescription. A recent case caused the introduction of the bill.

MEDICAL CORONERS.—"Judge Jackson stated emphatically in Court, on Thursday, during the progress of a trial in which reference was made to the Coroner's Court, that none but medical men ought to be appointed to the office of Coroner, as from their education they were peculiarly qualified to discharge efficiently the duties of the office. This opinion of his lordship appears to be acted on of late, very generally, both in Ireland and England, as medical men are elected almost everywhere that a vacancy occurs."—*Medical Times, from Limerick Chronicle*, March 8.

OBITUARY.—We are grieved to announce the decease of Professor J. B. BECK, of New York, on the 9th of April. The New York Academy of Medicine met on the 10th, and adopted resolutions expressive of their sense of this bereavement. His funeral was attended by the Academy in a body.

Our profession have recently lost another of its elder reputable members, by the decease of Dr. J. SMITH RODGERS, of New York, in the 57th year of his age. He fell a victim to the ravages of carcinoma, by which he had been long a sufferer. He was long connected with many of the public institutions of New York.

We are pained to hear of the sudden demise of the venerable Dr. Jo-

SEPH BLOODGOOD, of Flushing, Long Island, where he had been so long an ardent and honorable member of the profession.

HENRY HOBART CURTIS, M. D., Deputy Health Officer at Staten Island, died on the 26th of April last, another victim to the ship fever, contracted in the discharge of his duty.

RECORD OF MEDICAL SCIENCE.

PATHOLOGY AND PRACTICE OF MEDICINE.

The Dengue. By W. H. ANDERSON, M. D., of Mobile, Ala.—Early in the month of September, 1850, the Dengue invaded Mobile, and was almost universal in its attack. It spread itself through all classes, and attacked all ages; not even sparing infants under one month old. Although, as a general rule, the disease was ushered in by premonitory symptoms, and even gave notice of its approach four or five days previous to its actual invasion, yet, it was often sudden in its attack, making the transit from perfect health to painful sickness an almost momentary affair.

During the first fortnight of the career of this epidemic, it was a simple disease, uncomplicated with any symptoms or lesions except those which are peculiarly its own. As such, it was preceded by general uneasiness, wandering pains, decline rather than loss of appetite, and disturbed sleep. Most of these symptoms lasted from several hours to several days; at the end of which time, they all became exaggerated, and the disease set in with all its violence. The pains which had hitherto been general only, now had a tendency to become local, and to spend their forces on one or several parts of the body. The forehead, the breast, the lumbar region, and the joints, seemed to be the parts which were most affected with actual pain, while all the voluntary muscles were stiffened and suffused with defective innervation. In many cases, there were catarrh, irritability of the larynx, and slight cough. A large majority of the cases were accompanied with an eruption, which belonged to no particular class, but occasionally partook of the intense blush of scarlatina, the mottled appearance of roseola, and the actual spots of ephelis itself. In various instances, an exfoliation of cuticle, similar to that of scarlatina, occurred, leaving a tenderness of the newly exposed skin. This eruption, though usually accompanying the disease, sometimes did not make its appearance until the close of the attack. In this form of the Dengue, the febrile symptoms were light, and the secretions nearly natural. The treatment was simply palliative, consisting of anodynes and

sudorifics, and the duration of the attack was from two to seven or eight days.

As the season advanced, the Dengue, from being a light and unimportant affection, assumed a serious, and, in some instances, alarming aspect. This was not considered, however, so much an aggravation of the disease, as a complication of it with the usual autumnal fever. In these cases, superadded to the symptoms already mentioned, were great febrile excitement, obstinate vomiting, severe superorbital pain, injected conjunctiva, costiveness, deranged biliary secretion, and scanty, high colored urine. In many instances, there was total absence of sleep for several days and nights. The cerebral excitement amounted sometimes to actual delirium, and the stiffness of the muscles was such, that it was absolutely painful for the patient to move or be moved in bed. Any motion of the eyes, especially the attempt to roll them outwards, was accompanied with lancinating pain. The symptoms of this type of the Dengue were variable. In some cases, its invasions would be ushered in with a chill; in others, this symptom would be entirely wanting. Some patients evinced much febrile excitement, while in others the pulse remained nearly natural. As a general rule, the skin was hot and dry, little disposed to moisture; but now and then a case would present itself with cold extremities, general sensation of chillness, and profuse perspiration, throughout the attack. Such persons seemed to fare neither better nor worse than those who had an entire different train of symptoms. The convalescence, in all cases, was slow, and in many instances, was by no means in keeping with the lightness of the attack. This protracted convalescence is a remarkable and distinctive feature of the disease in question.

With regard to the treatment—it, of course, varied with the complications. Sudorifics were seldom neglected, and to relieve the pain and stiffness, all kinds of anodynes, both general and topical, were used; and most of them, we must add, with little effect. Camphor, veratrine, hyosciamus, aconite, prussic acid, chloroform, and a host of other remedies, of kindred action, were administered, with varied success. Morphine and quinine seemed to enjoy more reputation, in the simultaneous alleviation of pain and production of sleep, than any other remedies.

If we search for the cause of this wide-spread epidemic, we find it veiled in the same obscurity that hides the causes of all other diseases, and we are not prepared to attribute it exclusively either to electric, telluric, fungoid, or zymotic agency. The individual opinions of medical men, as to its true cause, vary so widely, that it is unnecessary to record them here; and even if they were produced, they would serve, from their discrepancy, only to prove that the true etiology is yet not understood.

Equally unsettled with the cause, is the pathology of the disease. From the irritability of the larynx, the redness of the fauces, the cough &c., which sometimes accompanies the Dengue, it has been called a catarrhal fever; but there are other symptoms, altogether different from any thing we see in ordinary catarrh. Some practitioners of respectability look upon it as an eruptive fever; but the advocates of this theory can-

not be unmindful that a great number of the cases go through their course without any eruption at all. An opinion has been current that the Dengue is a sort of bastard yellow fever, and this was strengthened by the fact that it made its appearance at the same time, and invaded in the same manner, with the genuine yellow fever. The differences are so great, however, between the two diseases, that the most ardent advocate could not establish a respectable relationship, or kindred. An epidemic of yellow fever, so universal in its attack as the Dengue was in Charleston, Mobile, and New Orleans, would be a scourge that has no parallel in the history of medicine. Some practitioners consider the disease as an epidemic neuralgia, and if the writer of this article inclines to any opinion at all, it is to that which classes the disease, in its *uncomplicated* form, with the neuralgic affections.

The limits of this report preclude the possibility of dwelling longer on this uncommon and interesting disease. It was intended only to give a rapid sketch of its history, as it appeared amongst us, but in doing this in such a cursory and imperfect manner, the writer feels it his duty to close with the remark that he has not done justice, either to the disease or to the reader.—*Proceedings of the Alabama Medical Association, Dec.*, 1850.

The Anthelmintic virtues of Kousso.—Numerous cases are reported in the late British journals, of the successful expulsion of tape worms by the use of Kousso, (Brazera anthelmintica.)

The Galvanic Poultice.—M. Recamier has proposed a new method of employing galvanism locally, to which the above term may be fairly applied. The "poultice" is a small mass of cotton wad, containing a layer of thin zinc plates, and another layer of copper plates. The wad is enclosed in a small bag, one surface of which is defended by some waterproof tissue. The poultice is applied as closely as possible to the skin, the impermeable surface being external. The cutaneous perspiration soon accumulates in the interior of the wad, and, being of an acid character, gives rise to the developement of a galvanic current between the zinc, and copper plates.—*London Medical Times, April 12th*, 1851.

SURGERY.

Fatal Effects Attributed to Chloroform.—Dr. Geo. Roe, of Cavan Infirmary, Ireland, records, in the Dublin Med. Press, 26th March, 1851, the following case of death from the use of chloroform, which occurred in September last. The patient was a young man, 24 years of age, suffering from extensive syphilitic ulceration of the foot and leg. Notwithstanding the existence of deep seated tubercles was suspected, at the earnest request of the young man, amputation of the leg was resolved on, which Dr. Roe proceeded to attempt, he informs us, "on the 20th of September, having promised I would give him something to

numb and take away the pain of the operation, as he said I had done to others.

He was of a very peculiar and very sensitive temperament, yet very patient and uncomplaining, and I knew he endeavored to conceal feelings and expressions which many with less cause or suffering would give way to. For this reason, I wished by every means to allay and prevent the agitation and excitement inseparable from the operation, by telling him I would perform it in the next room, and not require him to be carried down stairs to the operation room; I also placed the tourniquet on his thigh while in his bed, previous to his removal to the table.

He was cheerful and appeared to be firm and courageous, but when placed on the table, the heart's action was very *quick and weak*, but he did not appear faintish, or more pale than usual. I *then saw* Mr. Nalty, the apothecary, *measure one drachm* of the chloroform, in the small minim glass measure, and pour it on a little folded lint, which was placed in an oval hollowed sponge, held in the hand with a small towel. Recollecting I had used this chloroform in another case, and finding some little delay in producing the anæsthetic effects, and supposing the strength of the chloroform might be a little weakened, as the bottle had not been kept very closely stopped, I directed Mr. Nalty to add *thirty* drops more to that already put on the lint.

I then applied the sponge, &c., to the patient's nose, directing him to keep his mouth shut; I then gave the towel, &c., to the care of Dr. Halpin, who was at the opposite side of the table, while I went to prepare myself for the operation. Mr. Brice had scarcely screwed the tourniquet, which had been placed previously on the thigh, and while I was examining the state of the circulation in the tibial arteries, to prevent the least unnecessary loss of blood, which could not have occupied one minute—certainly he could not have made or taken *fifteen* inspirations,—when Dr. Halpin told me the anæsthetic effects were produced. This struck me as being unusually quick and sudden, and on removing the towel from the face we saw a slight convulsive action of the left eyelids, and the lids partially open, and a small quantity of saliva (frothy) at the mouth. I felt rather uneasy, but not much alarmed, as Dr. Halpin said he had often seen such symptoms from the effect of chloroform, but which I had not met with; and on a more minute and instant examination of the heart, the eyes, muscles of the limbs, &c., we found him *dead*. Every means within our reach were resorted to, to try and restore animation. The strongest ammonia and hartshorn were applied to the nostrils, the fauces and palate; cold air, cold water, to to the surface; and afterwards scalding water over the region of the heart; inflation of the lungs; general friction of the body; change of posture, were all in turn and rapid succession, tried, but without the least effect. I lament I had no means of making or procuring oxygen gas, and unfortunately my little portable galvanic apparatus was not then in order or ready for use; so that we had the sad and painful spectacle of our patient *killed*, as if by a stroke of lightning, in less than *one* minute, before our eyes."

A Petrified Bean in the Urethra—Removed by Incision. By Dr. Leopold, of Meerane.—On the 16th December, 1848, Dr. Leopold was summoned to a child, four years of age, suffering under the symptoms of stone in the bladder. The father obstinately refused to permit a catheter to be passed; internal remedies were therefore administered to endeavour to allay his sufferings, but in vain. Examination by the rectum failed to give indication of stone in the bladder. A hard substance, the size of a bean, could be felt in the urethra behind the scrotum, and could be moved only very slightly backwards and forwards. The catheter, when at last allowed to be passed, was stopped by this body. An operation was at length determined upon, with the father's consent. The patient's legs were tied as for lithotomy, and an incision made down upon the stone; which, when removed, was found to be a calculus, having a common bean for nucleus. The child had complained of pain and difficulty in micturition since the preceding Easter. It is probable that the child had passed the bean into its prepuce, whence it had slipped into the urethra and bladder.

In another case Dr. Leopold found a small calculus in the urethra, and was able to push it forward to the orifice of the urethra, which being enlarged by a slight incision, the calculus was readily removed.—*Casper's Wochenschrift*, 1850.

*** It seems scarcely possible that so large a substance as a bean could have slipped into the orifice of the urethra of a child, four years of age. It would almost lead one to suspect that a second party must have been herein concerned. The necessity which existed to enlarge the orifice of the urethra in the subsequent case tends to confirm this view. —*London Medical Gazette.*

Excision of the Astragalus and Os Calcis, with some general observations on the Excision of Joints. By Mr. Thomas Wakley.—Excision of the extremities of the bones of joints, was first practised in 1782, by Mr. Park, one of the surgeons of the Liverpool Infirmary. In the same year, Moreau excised the extremities of the bones of the elbow joint, and in a fortnight after the operation the patient was so well, that he was allowed to go wherever he pleased, with his arm supported in a case. It was at first powerless, but it slowly regained its strength, and the man could ultimately thrash corn and hold the plough with it. In the same year, (1782,) the excision of the elbow-joint was twice performed by another French surgeon, and in both cases with complete success, the patients retaining considerable movement of the arms. Operations for the removal of the extremities of bones entering into the formation of the different joints, have been practiced since by English as well as continental surgeons; and the general success which has attended them fully justify their repetition. The limbs which have been saved are, in many instances, living monuments of the triumphs of surgery. Until the last few years, the ankle-joint was not considered favorable for the operation of excision, its complicated machinery and anatomical relations being considered impediments to the complete excision of the ends of the bones.

Some surgeons still adhere to the opinion, that it is necessary to amputate the foot for disease of the bones of the tarsus; thus we have the operations of Chopart and Syme for the removal of portions of the foot. However, there are cases on record, and there is evidence afforded by the condition of patients themselves, proving in some cases the superiority of excision of the ankle-joint over amputation of the foot. While contemplating the operation, an account of which formed the principal feature in his paper, Mr. Wakley received great encouragement from reading the cases of compound injuries to the ankle-joint, narrated by Sir Astley Cooper in his treatise on Dislocations and Fractures, as it was shown by this celebrated surgeon that these cases had recovered and done well after the most severe forms of dislocation and fracture, where even the astragalus was dislodged or extracted. Thus Mr. Wakley had operated three times upon the ankle-joint, in two cases partially excising the bones of the joint. In both cases amputation had been considered necessary; but the modified operation had saved the limbs. The third case was that of William Brown, lately exhibited to the Society as having undergone excision of the astragalus and calcis. The operation, which was perfectly successful, but the steps of which it is unnecessary to relate, was of a novel character—the astragalus and calcaneum, together with the malleolar processes of the tibia and fibula, being removed for extensive disease existing in the two first-named bones.—*Medical Times, April* 12, 1851.

ANATOMY AND PHYSIOLOGY.

Preservation of Anatomical Preparations by Arsenuretted Hydrogen Gas.—Mr. MIDDLETON stated that, from the great expense of spirit of wine, and the various objections to the employment of other preservative fluids, he had been led to make some experiments with gases having antiseptic powers. He had found arsenuretted hydrogen to answer admirably, and he exhibited a specimen of diseased structure so preserved. The preparation had been several months in the bottle without showing the slightest symptom of change.

The object to be preserved should be placed in a suitable bottle filled with water. The bottle is then to be inverted in a pneumatic trough, and the gas passed into it in the ordinary way, so as completely to displace the water. The mouth of the bottle must then be closed with a good cork under water, and afterwards dipped in melted wax.

The gas can very well be prepared by mixing in a retort sulphuric acid, with a certain quantity of water.

Dr. King suggested that, for greater safety, the mouth of the bottle should be closed with a glass stopper, and hermetically sealed by the blow-pipe.—*London Medical Gazette.*

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NEW SERIES.—NO. LXXVIII.—JUNE, 1851.

ORIGINAL COMMUNICATIONS.

Lectures on Scarlet Fever. By CASPAR MORRIS, M. D., late Lecturer on Practical Medicine in the Philadelphia Medical Institute.

LECTURE V.

Such are the phenomena which usher in, and mark the progress of, scarlet fever; and such the primary results of its impression on the human system. We are now prepared to arrive at some conclusion as to its character, which may be thus expressed.

Scarlet fever is a febrile disease, dependent on a specific miasm, resulting from unknown external influences; yet capable of reproduction, and diffusing itself, both by direct contagion and by the establishment of a peculiar condition of the atmosphere within limited districts: the susceptibility to the influence of this cause varies in different individuals and at different periods of life, and is generally exhausted by one attack: the morbid impression is made on the nervous system, and transmitted to the circulating fluids through which every part of the organization becomes subject to the influence, while the principal localization of diseased action is in the capillaries of the skin and mucous membrane,

especially that which covers the pharynx: it has a fixed duration of from 120 to 160 hours, at the close of which period the disease has a natural solution, unless the disturbance of the functions has been so great as to destroy life, or local lesions have been produced which maintain the irritative action.

We now proceed to the consideration of certain results of this impression, which are more durable than the disease itself; quite distinct in their character, equally, perhaps more, to be deprecated than the primary disease.

These are generally known as the *sequelæ*, and as such, have been occasionally referred to in our previous lectures. They may be divided into two classes. 1st, Those which appear to be a mere continuation of the local lesions developed during the course of the disease, which are confined to the same vicinity; sloughing and ulceration of the throat, diseases of the ear, often extending to the bony structure, and abscesses about the neck.

It can scarcely be necessary to add any thing to the remarks already made on the subject of the affection of the throat, when treating of that symptom in the description of the anginose and malignant forms of the disease. It occasionally happens, however, that the ulcerative process set up from the very commencement of the case, continues long after the scarlet fever has run through its regular stages; and extends itself upwards into the posterior nares, or downward into the pharynx, or even invades the larynx.

It may, however, be well to inform you, that a question has been raised, whether there is ever an actual solution of continuity of the parts about the throat. Of this there can be no doubt on the part of those who have seen the anginose and malignant forms in their greatest intensity. I have known the entire destruction of the soft palate, and extensive sloughing of the adjacent parts even where recovery has followed.

Disease of the ear may either occur during the course of the primary disease and be prolonged after that has reached its termination, or may be first manifested even some weeks after the scarlet fever has seemingly disappeared. It is sometimes ushered in by a rigor and deep seated pain, followed by purulent discharge, and at others, is first manifested by discharge from the

external meatus of a thin apparently serous fluid, which soon takes on the appearance of unhealthy pus.

The cases which thus manifestly originate in the membrane lining the external meatus generally yield speedily to appropriate treatment; while those which are dependant either on the transmission of the inflammation along the Eustachian tube, or in which that process has its commencement in the internal ear, are of a much more serious character. In either case permanent deafness may result; if both ears are affected, reducing the child to the condition of a mute. I had a case some years since in the person of a fine healthy boy of about eight years old, in which the primary symptoms were all of the most aggravated character. The swelling of the throat and ulceration of the mucous membrane of the pharynx and nares were very extensive. As the primary disease subsided the irritative action of these local lesions took its place, prolonging the duration of the case for many weeks. Finally, a chill, followed by intense febrile reaction and extreme pain in the ear, announced the extension of the disease to the internal ear. Stupor, interrupted with violent shrieks, like those which occur in acute meningitis, supervened: suppuration was established, and the matter found its way to the surface by the external meatus, and by an abscess over the mastoid process, evidently connected with the cells of that portion of the temporal bone. Caries of the bone followed, which continued for several years, and though the general health of the child was in great measure re-established, nothing had any influence in arresting the disease of the bone, which continued to extend itself until ultimately it reached the membranes of the brain, and he died of acute meningitis.

Croup may also occur as a sequela of scarlet fever, as well as during the primary stages of the disease; in either case a most formidable complication. Some years since one of my patients survived an attack of scarlet fever in which every complication and sequela of the disease appeared to conspire for her destruction. The disease was ushered in by convulsions. There was extensive sloughing of the soft palate, and then as late as the tenth day the hard croupal cough gave evidence of the invasion of the larynx. I attempted the application of the solid nitrate of silver to the part, when to my infinite dismay a large portion

was broken off by the child in its struggles and swallowed. I said nothing of the accident to the parents at the moment, but calling for the salt cellar, promptly administered a strong solution of the muriate of soda. This not only decomposed the nitrate of silver but acted as a speedy and efficient emetic, and very probably saved the child's life, by the vomiting induced, as to my great surprise it recovered.

Still more frequently, the lymphatic glands of the neck become implicated, and serous effusion into the cellular tissue beneath the jaw impedes the deglutition and respiration, and either accelerates the fatal catastrophe, or produces the formation of large collections of pus, which may give rise to hectic irritation, and result in death after prolonged suffering.

The 2d class embraces lesions, which are more general in their character; among which the first place in importance as well as in order of time, must be assigned to that destruction of the epidermis by the cutaneous inflammation which gives rise to the process of *desquamation*, to which reference has been already made. It may be indeed a question well worthy investigation, how far other sequelæ, inflammation of the kidneys, and dropsical effusions, and inflammation of the membranes of the heart, may be dependant on this interruption of the functions of the skin. Certain it is, that all these sequelæ are observed to follow more frequently those cases in which the affection of the skin has been most decided. Some authors make a contrary assertion; but my own observation is very positive on this point. Thus in the malignant and irregular forms of the disease, the mortality is greatest in the first week, or results from the injury done to the brain or nervous system, by the direct onset of the disease. While in those mild cases of the simple form in which there is abundant efflorescence, with high febrile reaction, death, if it occur at all, is produced by the dropsical effusion, or some of the other secondary affections, as those of the heart or brain. When the rash has been very vivid, and the heat and dryness of the skin corresponding, the destruction of the epidermis is most decided; and most writers agree in testimony, that in such cases, there is more reason to apprehend the occurrence of serious sequelæ, while in those cases in which the rash does not appear, it is but slight, or recedes soon after its appearance; the

functions of the skin being less disturbed, the convalescence is less frequently interrupted by the occurrence of dropsical effusions, or of inflammation of the membranes of the heart, which prove the most fertile sources of danger after the first stage of the disease has been safely passed through. You must also bear in mind the fact that the disease of the skin is more strongly marked in the simple and anginose than in the malignant or irregular forms, and all writers coincide in the declaration that the sequelæ are more usual in the mild and regular, than in the severe and irregular cases.

The importance of the skin, and the influence upon the whole economy of the mode in which its functions are performed, cannot be too strongly impressed on your minds. We all are conscions of the effect on our own sensations arising from the arrest of those functions, by whatever cause it may be produced; and you know every feeling of discomfort is only an indication of a deviation from health. This, however, does not make so strong an impression on your minds as the facts which are proven by observation on the results of the healthy action; when for example, you estimate the influence on the circulating fluids which must be produced by the twenty-eight miles of "perspiratory tubing," with its seven millions of pores opening through the epidermis, discharging daily two ounces of excrementitious matter, and not less than thirty ounces of watery vapor, you can better appreciate the effects which must result from the entire interruption of this excretion, produced by the drying of the cuticle through which those pores are transmitted: nor must you forget that this excretory process is not the only one which is going on through cutaneous agency. From the teacher of Physiology you will learn how large is the amount of influence on the blood, subsidiary to that of the lungs, exerted by the direct imbibition of oxygen through the skin. Now if you bear in mind the activity of the vital processes, and that no one of them is needless, but each absolutely essential to the other, and to the integrity of the whole organization; and then remember that by the destruction of the cuticle not only the depurative action is arrested, but an obstruction placed on one channel, by which the vitalizing influence of oxygen is introduced, you will be better prepared to appreciate the con-

dition of the blood, and the consequent danger to the patient, in scarlet fever, from this cause. It is, moreover, a fact well established by the observation of surgeons, that in burns and scalds, the danger is proportioned less to the depth of the injury and the intensity and duration of the heat applied, than to the extent of surface involved, thus affording additional evidence of the importance to the system of the cutaneous function. Nor must you overlook the fatal results which have been produced, on animals of a lower grade, by coating the skin with some impermeable material. Now in this disease the whole surface is affected, and more decidedly than in any other of the exanthemata, except confluent small pox. In rubeola there are patches of healthy skin; in erysipelas the extent of surface involved at one time is much smaller, and neither of these diseases leaves the dead cuticle to impede the normal action of the new. You will not, therefore, be surprised that when treating of the inferences, as to the final result, to be drawn from the symptoms of the disease, I cautioned you against the common error, of supposing that the freeness and extent of the cutaneous affection was a favorable sign; and will understand why I thus draw your attention to the desquamatory process and place it first among the sequelæ of the disease; and will also be the better able to comprehend why the mortality is often greater in the secondary than the primary stages. So decidedly is this the case, that common observation has taught it. When on one occasion I assured an intelligent mother of a large family, several of the children having been attacked simultaneously, that the crisis of the disease was passed, she replied: "well, then this is the period of danger; Mr. ———, who lost several children with it, told me that they all died just as the doctor told him they were getting well."

This, then, is the period in which your anxieties should be especially active and your care most vigilant; and the danger to the patient is connected with, if not wholly dependent upon, the interruption to the healthy action of the cutaneous emunctories. The process of casting off the cuticle, which we observe, and to which this term *desquamation* is applied, is not itself a diseased process, but the effort to get rid of an impediment to the normal action of the system. Commencing from the time at which the cuticle is destroyed in favorable cases, in others it is post-

poned, sometimes even for a fortnight. You will always find the peril proportioned to the tardiness with which it is accomplished; and until it is completed, you will find your patients depressed by the poisoned condition of the blood, and liable to the sudden development of cerebral disease or inflammation in some organ essential to life. But the external cuticle is not the only organ for exhalation, the action of which is in a similar manner suspended or destroyed by the disease. You are of course aware from observation on your own person, and have been taught to apply this observation to its relation to disease, that wherever any influence from *without* arrests the cutaneous transpiration, a corresponding increase is found in the watery constituent of the secretion from the kidneys. This is not the case, however, in diseases where the same cause certainly operates equally on both kidneys and skin, and produces a similar result in each. Hence you will find, that though the amount of urine has been but little diminished during the four or five first days of scarlet fever, it is either wholly arrested or becomes very scant about the same time that the functions of the skin are most impeded. The same is true in other febrile diseases, in most of which, you will find the excretions through the skin and kidneys are not antagonistic as in health, but are either suppressed or increased in freeness under the influence of some common cause. The occurrence simultaneously of increased discharges from both organs is noted as marking the crisis of febrile diseases. Now it is not at all a forced idea that the same diseased action may be established in the Malpighian bodies and epithelium of the kidneys, as is observed on the external tegument; and it is well known that the flow of urine is always much diminished about the time at which the process of desquamation is at its height, and I believe epithelial scales are found at this juncture abundantly in the urine. The facts observed therefore, confirm the suspicion which might be entertained from reasoning only, that there is such a connexion beween the diseased condition of the skin and kidneys, in their influence upon the other sequelæ of scarlet fever, as justifies the relation which I have ventured to suggest before; and indicate the latter organs as equally interested with the skin in the production of some of the results which will claim your attention immediately. Whether the

diseased condition of the kidneys be dependant on the interruption of the functions of the skin, or both organs are simultaneously affected by one common agency, I am not yet prepared to decide positively. Certain it is, that dropsical effusions occur in a very large proportion of cases of regular scarlet fever, frequently, in despite of all precautions, always if care be not taken to prevent exposure to atmospheric vicissitudes or errors of diet. The more regular the course of the case, the more vivid and abundant the eruption, the more certainly may this desquamation be expected, and its consequences, dropsical effusion, be looked for.

The external cellular tissue affords the most common seat for the serous effusion. It may take place, however, into any or all the cavities of the body from the ventricles of the brain or pericardial sac, or cellular structure of the lung, to the tunica vaginalis testis.

The actual effusion of fluid is generally preceded, a longer or shorter time, sometimes only four or five hours, in other cases, for a day or two, by feelings of languor and drowsiness, loss of appetite, nausea and vomiting, coated tongue, and great heat and dryness of the skin: the pulse is tense and corded, with a return of the frequency if that had subsided. From the end of the first week to the beginning of the third, is the period at which these symptoms are most frequently developed. Though no amount of precaution can wholly remove the liability to the result, it is by no means uncommon to find it brought about by improper exposure to atmospheric vicissitudes, or some error in diet; and it is to the neglect of care in these points, resulting from the idea that the disease has been too mild to require it, we may ascribe the greater proportionate frequency of dropsy after the mildest cases of simple scarlet fever.

The present will probably be as appropriate a place as any that may offer to impress on you the importance of enforcing the greatest care with regard to this exposure, and indulgence of appetite, since it is sometimes very difficult to make those who have not purchased their own experience by a severe lesson fully aware of its necessity.

In the year 1830, I was sent late at night, by the late

Dr. Dewees, to see the family of an officer of the Navy, in which five of the children had been under the care of another physician, with mild scarlet fever. He had seen them in the morning, pronounced them well, and had given his consent to their being allowed the free range of the house and the usual diet of the family. When I reached the house, two of the children were already dead from convulsions, and the others were saved with difficulty, having fever followed by anasarca, depending, in all probability, on inflammation of the kidneys, the result of the exposure of the day. No examination of the bodies was permitted, but the deaths were undoubtedly owing to effusion of fluid within the cranium. Dr. Chapman describes similar results as having occurred under his own observation.

In another instance I was attending a child from South Carolina at lodgings here, which was carried happily through a mild attack, with but little treatment except of a preventive character. An older daughter of about 18 was taken sick after I had ceased my attendance in the first case. The symptoms were so benign, and the treatment I had adopted had been apparently so nugatory, that the family were induced to believe the disease was but little to be dreaded, and required no care whatever. They, therefore, did not seek medical advice in the second case, and permitted her to pursue her usual habits, as regards diet and exposure; at the end of a fortnight I was sent for to prescribe for general anasarca for which they were at a loss to account. Warned by these and similar instances, some of which I shall refer to when treating of other sequelæ, I am always earnest in my endeavors to impress on the parents of scarlet fever patients, the great importance of care on these points, until the entire process of desquamation has been completed; and this care is more especially important, at the very juncture when it is least likely to be exercised, just at the close of the process, when the condition of the blood caused by the arrest of the secretion from the skin and kidneys is at its worst point, and the new cuticle most tender and liable to the impression of cold air. The effusion is generally first observed about the face and hands. The complexion suddenly assumes a less healthy hue, resembling that of anemia, the eye lids are observed to be somewhat puffy, and upon attempting

to flex the fingers they are found to be stiffened. The trunk and upper parts of the lower limbs next assume the appearance of disease, and on feeling these parts they are sensibly harder to the touch than natural, and there is often some complaint of tenderness on pressure, which, moreover, does not leave the indentation found commonly in anasarca. All these circumstances agree in the indication that the skin itself is in fault, and that the disease is not one of mere infiltration, caused by some affection of the viscera, or destruction of the crasis of the blood. The suddenness with which this swelling follows exposure, also confirms the same view, as I have known it to be manifested almost immediately on the return from a drive, or exposure at the door or window, or other similar imprudence. The bowels are generally costive at this time, and even though the secretion of urine may not before have been so much diminished as to arrest attention you will now find, if you make enquiry, that it is very scanty, high colored, and turbid. Those who have made critical examination of this fluid under these circumstances report it to contain blood, and albumen, and to be very acid. At one time this was thought to indicate the existence of the incipient stage, that peculiar condition of the kidney, found in cases of what is known as Bright's disease. This is, however, an error. The presence of albumen in the urine as indicated by the deposit of that substance coagulated by heat or nitric acid, is often dependant on simple inflammation or perhaps congestion only of those organs, and this is undoubtedly the case in the instances under consideration. In Bright's disease the quantity of the urine is increased, its specific gravity diminished, its color light: in all these respects presenting a marked contrast with the condition of the secretion in the dropsy following scarlet fever. The examination of the bodies of those who have died of scarlet fever, as reported by MM. Rilliet and Barthez, proves that no such disorganization as that known to produce Bright's disease exists. It is true these authors do not indicate how many of their fatal cases had progressed to the period in which dropsy is developed, but they say that "in no case were the kidneys enlarged or pallid, though sometimes red or congested." There is no disease in which we stand more in need of accurate, well digested observations of post-mortem examinations. This

results from the fact that the mortality generally occurs in private practice, and the distress of parents and friends prohibits the physician from proposing anything which would aggravate their sorrow.

Anasarca is the form in which the dropsical effusion most generally presents itself. If it were the only one, the previous diseased condition of the cutaneous capillaries, and the generally acknowledged dependance of the disease on the impression of cold on the surface, would justify the belief which has been expressed by some authors that "it arises from increased action in the sanguiferous system."* Next to the cellular tissue beneath the skin in liability to this effusion, I should place the pleural sac or the pulmonary tissue; and after this in order of frequency, the ventricles of the brain and the pericardium, and I have no doubt that sudden death is caused in many cases by these latter lesions. An instance of this occurred in my own practice. An infant had been carried out by its nurse, apparently in perfect health. It was brought home in a state of collapse, and died in a few hours without reaction. Within a few days another child in the same family sickened with scarlet fever, and had a mild anginose attack with an abundant eruption. It passed through the first week safely, and was apparently convalescent, when an anxious grandmother, confident that it stood in need of more nourishment than I had allowed to be given, fed it largely with cakes, ice cream, and animal food. At the end of 48 hours of this injudicious treatment, the child was seized with general anasarca, with dry cough, dyspnœa to such a degree as prevented the child from lying down, and death speedily ensued. In this case there was pulmonary œdema and effusion into the pleura and pericardium. Dr. Hamilton reports three similar cases among the boys in a school in England, in which death took place within thirty-six hours, the symptoms indicating effusion in the ventricles of the brain, and the cavities of the thorax and abdomen, as well as in the cellular tissue generally. Cerebral effusion is certainly the most formidable of the sequelæ of scarlet fever, though happily less frequent than the anasarca. It is indicated by the occurrence of stupor, or violent headache and vomiting. The pulse is slow, one or both pupils dilated. Vision

*Tweedie, Cyclop. Pract. Med.

is impaired or even lost entirely, and there may be strabismus, or even general convulsions, or paralysis. The countenance is at the same time bloated, often excessively so.

Endo-cardial inflammation is another of the sequelæ of scarlet fever of a most formidable character, which you will find mentioned by most authors. It has only once met my notice. This was in the case of a lad of 12 years old. Scarlet fever in its mildest form had passed through a family of six children, of which he was the oldest and last taken. The most rigid attention to diet, and the greatest care to avoid exposure, had been practised; my attendance had been prolonged to six weeks, and as convalescence was fairly established, I had called in the evening to take my leave, and sat till a late hour. In parting I expressed my gratification at the result, for I can assure you, you have great cause for thankfulness when this disease assumes a form so benign as to pass through a family of that size, and leave the circle unbroken. The reply of the mother, was the expression of her fear that the peril was not yet entirely passed. The hearty laugh of the one that had last been sick, which was just then heard from the nursery, might have induced me to ridicule such apprehensions had I not known the treacherous character of the disease. Scarcely three hours had elapsed when I was summoned to see him with great dyspnœa, tossing about the bed unable to lie down, with a small tense pulse and hot skin. Bleeding, leeching, blistering, calomel, digitalis and colchicum, aided by the most anxious and affectionate nursing and rigid abstinence, carried him through this attack, but left him with an hypertrophied condition of the left ventricle, and disease of the valves, from which he has, however, since recovered.

Rheumatic pains, with fever, are of very frequent occurrence during the convalescence from this disease. It is often, though not always the result of premature exposure, and like the dropsical effusion, is more likely to occur in mild than grave cases. A fine healthy child was spending the summer months in the country where scarlet fever had not before prevailed. He had an eruption with febrile symptoms, but of so mild a character that the physician in attendance, remarked, he might have had scarlet fever, but that there was not sufficient disturbance of the child's

health to correspond with the amount of eruption, and his ideas of the disease. The little fellow was allowed to pursue his usual amusements without interruption. At the end of a week he complained that his "legs were too long for him," that he was "tired," became feverish and languid, refused food, lost the power of using his lower extremities, and died. This was an extreme case; more generally some time during the second week, there is a return of the fever, the pulse quick and corded, and the skin hot and dry; the child complains of pain in the legs, and cries when any attempt is made to move it. This state continues two or three days, and then yields to proper treatment.

Some authors speak of purulent deposits in the joints. This is a result which has never fallen under my notice.

Diarrhœa, when it occurs, is to be ascribed to the irritation of the putrid colluvies swallowed from the ulcers in the throat, rather than to any direct influence of the cause of the disease on the mucous membrane of the alimentary canal.

(To be continued.)

A Case of Poisoning from Opium, successfully treated by Electro-Magnetism. By J. B. Biddle, M. D.

The following case illustrates, I think, very strikingly, the value of the electro-magnetic current as a means of relieving the coma produced by narcotic poisoning.

At about half-past twelve o'clock of the night of the twenty-eighth of April last, I was called to visit a woman, described by the messenger as being in a fit. No history or explanation of the case could be obtained, except that the patient had gone out at about half-past seven o'clock to get something at an apothecary's for a cramp colic; that she had upon her return home eaten her supper as usual, then gone to bed, soon fallen into deep sleep, and finally, at about midnight, from her unusual respiration and the impossibility of rousing her, excited the alarm of her husband and family.

I found her in a state of profound torpor; her breathing extremely slow and interrupted, stertorous and gasping, with spasm of the throat, lividity of the countenance, inability to swallow, utter insensibility to the most violent agitation, pupil

contracted to the size of a pin's head, pulse scarcely perceptible at the wrist—in short, all the symptoms of an advanced stage of asphyxia. That it was a case of narcotic poisoning, rapidly approaching a fatal termination, was, I thought, evident, and I at once so expressed myself—the family, however, still professing themselves unable to explain or account for it.

Acting, however, upon this opinion, I obtained the assistance of my friend, Dr. Goddard, who lives in the neighborhood, and the use of his electro-magnetic apparatus; and, the doctor coinciding in my view of the case, we determined, although with no very strong hope of saving the woman's life, to resort to this agent. An attempt was made to introduce the stomach tube, but was unsuccessful, owing to spasm of the pharynx, and its introduction could have been of no service, as, at the lapse of more than five hours, the poison must have been altogether absorbed from the stomach.

The electro-magnetic machine employed consists of two coils rotating between the poles of two horse-shoe magnets—an unusually large and powerful instrument, producing a rapid succession of violent shocks. One pole was applied to the nape of the neck, the other to the pit of the stomach. For about two minutes after the battery was started no effect was produced. The patient then began to make convulsive efforts with her hands, as if to put away something annoying her, and, in perhaps half a minute more, she opened her eyes with a ghastly stare. The battery being still kept in action, she rose up in bed, and was able to mutter some indistinct answers to questions put her.

Upon withdrawing the electric current, the woman immediately sank back into the state of torpor in which I had found her. But, as soon as it was renewed, artificial vitality was again restored. When the current was a second time stopped, after about the same period of application as at first, the woman continued for some two or three minutes awake, gradually, however, relapsing into coma. After each application of the battery, the interval of consciousness became longer, and, at the end of two hours, she remained roused for a full half hour, in which she was able to let us know what she had taken.

It appears that she had bought "three cents'" worth of laudanum, and, never having taken it before, she supposed it was a proper dose, and swallowed it all. It amounted, as she said, to some

three teaspoonfuls—propably two fluid drachms, as this is, I believe, the quantity usually sold for that price. I think it probable that she was also previously somewhat under the influence of whiskey, as we detected it on her breath, and this must have increased the narcotic effect of the laudanum.

We now gave her some volatile alkali, and strong coffee, but they were not long retained. After half an hour's consciousness, stupor slowly crept on again, and a further resort was had to the battery, which was followed with rapid, and, as it proved, a final revival.

The patient now got up, walked about, conversed clearly, was able to keep some coffee on her stomach, and it was apparent that she had at last struggled through the effects of the narcotic. Some disposition to somnolence remained, but this was easily overcome, without recourse to the battery. I remained with her till half-past four—an hour and a half from the last application of the electricity, and then left her in charge of her friends, directing them not to suffer her to sleep till I saw her again.

Between eight and nine I found her very comfortable and completely awake, although begging hard to be allowed a nap. Three or four hours natural sleep now took place, and left her completely recovered.

It may be worth mentioning, that in the successive applications of the poles of the battery, while one was kept constantly to the nape of the neck, the other was placed indifferently at the pit of the stomach, the arm-pit, and in the hand; and the effect did not appear to vary.

Since drawing up the notes of this case, upon mentioning it to my friend, Dr. Mütter, I found that he had lately resorted to electro-magnetism with success under similar circumstances; and he kindly offered the history of his case for publication with the foregoing.

May 14*th*, 1851.

Dear Doctor:—In accordance with your request, I send a brief outline of the case of "poisoning with opium," to which I referred in our interview the other day.

Last spring, my colleague, Prof. Pancoast, and myself, were summoned about 11 o'clock, P. M., to visit a young gentleman residing at the corner of Ninth and Market streets. On our

arrival we found that a large quantity of laudanum had been swallowed accidentally, and although strong and very appropriate means had been immediately taken by several medical students who lodged in the same house, no impression seemed to be made upon the influence of the drug. All the evidences of rapidly approaching death were manifest, and as all other measures had been unsuccessfully employed, we determined to employ *electro-magnetism.* An instrument was accordingly obtained, one pole placed upon the nape of the neck, and the other over the epigastrium. Almost on the instant, the muscles of respiration were violently agitated, and the patient sprang up in bed, opened his eyes, and answered questions. The pain in a few moments was so severe, that we were obliged to change the position of the poles of the machine. Keeping one steadily applied to the back of the neck, the other was made to touch different points of the thorax, throat, abdomen and upper extremities. The *burning* sensation occasioned by the fluid, was almost intolerable, causing the patient to complain loudly, and effectually preventing any return to the lethargy from which he had so happily been aroused. We deemed it most prudent to continue our efforts, even after the patient was fully restored to consciousness, but I think not more than *an hour* elapsed between the first application of the remedy and the complete relief of our young friend.

Yours truly,

Dr. Biddle. THOS. D. MÜTTER.

Thermometrical Report of the Climate at Aiken, S. C.

May 17, 1851.

To the Editors of the Medical Examiner:

GENTLEMEN,—I enclose a very interesting and valuable "table," prepared by my intelligent friend and patient, Mr. B., of this city, who passed several weeks at *Aiken, South Carolina.*

As this village is becoming a favorite winter resort, for invalids affected with pulmonary disease, any information bearing upon its climate, must prove useful to the profession.

Very truly yours,

THOS. D. MÜTTER.

The Thermometer, at Aiken, S. C. winter of 1850 *and* '51. (*Northern Exposure reached by no sun during the whole season.*)

1850.	7 A.M.		12 M.		5 P.M.	
Dec. 23	42	clear				
" 24	26	"	44	clear	37	clear
" 25	33	cloudy	49	cloudy	45	cloudy
" 26	42	"	56	clear	49	clear
" 27	38	clear	56	"	48	rain
" 28	42	rain	48	rain	52	cloudy
" 29	42	clear	48	cloudy		"
" 30	42	cloudy	48	"		"
" 31	36	rain	38	"	38	"
1851.						
Jan. 1	40	cloudy	52	clear		"
" 2	39	rain	39	rain		rain & sleet
" 3	31	clear 3 in. snow	42	clear	38	clear
" 4	37	clear	49	"		"
" 5	32	clear	54	"	46	cloudy
" 6	37	"	55	"		clear
" 7	48	"	60	"		"
" 8	38	"	58	"	59	"
" 9	48	cloudy	58	rain	55	rain
" 10	49	clear	59	cloudy		cloudy
" 11	47	cloudy	56	clear	49	clear
" 12	44	clear	55	"	50	"
" 13	36	"	54	"	48	"
" 14	28	"	52	"	48	"
" 15	32	"	59	"	48	"
" 16	54	cloudy	62	cloudy	50	"
" 17	55	clear	68	clear	50	"
" 18	44	cloudy	39	rain		rain
" 19	32	"	33	cloudy	33	"
" 20	31	rain	47	"		cloudy
" 21	30	clear	50	clear	44	clear
" 22	44	"	60			
" 23	50	rain	46	rain	44	"
" 24	44	cloudy	52	clear	49	rain
" 25	37	clear	58	"	52	clear
" 26	50	cloudy	59	cloudy	57	"
" 27	52	clear	59	clear	50	"
" 28	29	"	60	"	50	"
" 29	30	"	55	"	50	"
" 30	33	"	58	"	48	"
" 31	25	"	37	"	32	"
Feb. 1	30	"	40	"	35	"
" 2	44	"	62	"	55	"
" 3	55	rain	62	rain	56	"
" 4	54	cloudy	60	cloudy	55	"
" 5	58	clear	62	clear	55	"
" 6	60	"	65	"	60	"
" 7	55	"	62	"	60	"
" 8	60	cloudy	70	cloudy	65	"
" 9	64	"	68	"	65	"
" 10	67	rain	65	"	65	"
" 11	50	clear	60	clear	58	"
" 12	34	"	54	"	54	"
" 13	40	cloudy	52	cloudy	50	cloudy
" 14	40	rain	50	rain	48	rain
" 15	62	cloudy	65	cloudy	60	cloudy
Feb. 16	40	clear	55	clear	50	clear
" 17	30	"	55	"	40	"
" 18	41	cloudy	52	cloudy		
" 19	39	clear	60	clear	59	clear
" 20	49	cloudy	60	cloudy	58	cloudy
" 21	59	rain	63	rain	59	rain
" 22	50	cloudy	67	clear		
" 23	53	"	68	"	64	clear
" 24	61	clear	79	"		"
" 25	42	"	64	"	56	"
" 26	37	"	64	"	58	"
" 27	47	"	68	"	65	"
" 28	56	"	72	"		"
Mar. 1	44	"	58	"		"
" 2	44	"	56	cloudy		"
" 3	37	"	50	clear	46	clear
" 4	26	"	54	"		"
" 5	36	"	68	"		"
" 6	58	rain	69	cloudy	70	clear
" 7	60	"	70	rain	48	rain
" 8	42	cloudy	50	clear	48	clear
" 9	32	clear	49	"		"
" 10	34	"	52	"	47	"
" 11	36	"	58	"	58	"
" 12	39	"	65	"	58	"
" 13	39	"	66	"		"
" 14	49	cloudy	70	"		"
" 15	50	clear	70	"	70	"
" 16	58	"	70	"	68	"
" 17	50	"	65	"	50	"
" 18	44	"	58	"	52	"
" 19	39	"	57	"	50	"
" 20	33	"	54	"	57	"
" 21	38	"	62	"	62	"
" 22	50	cloudy	53	rain		"
" 23	48	"	62	clear	55	"
" 24	43	"	61	"	57	"
" 25	39	clear	66	"	59	"
" 26	40	"	70	"	69	"
" 27	53	"	70	"	68	"
" 28	52	"	76	"	70	"
" 29	57	cloudy	68	rain		rain
" 30	58	"	70	cloudy	62	"
" 31	58	rain	68	rain	62	"
Apr. 1	58	cloudy	71	clear	67	cloudy
" 2	60	rain	70	rain	62	"
" 3	54	clear	63	clear	58	"
" 4	46	"	65	"	64	clear
" 5	58	rain	73	cloudy	70	cloudy
" 6	59	clear	69	clear	70	clear
" 7	50	"	74	cloudy	70	rain
" 8	64	rain	66	"	64	clear
" 9	43	clear	58	clear	58	"
" 10	44	"	64	"		"
" 11	51	"	69	"	68	"
" 12	49	"	72	"	65	"
" 13	56	"				

Note on the Use of the new local Anæsthetic. By T. D. MÜTTER, M. D., Professor of Surgery in Jefferson Medical College, Philadelphia.

I am indebted to my friend Mr. Barnet Phillips, of Philadelphia, for a specimen of the new local anæsthetic, known to us by the several terms, "Eau Hollandaise," "Chlorure of the oil of the Dutch Chemists," and "Ether chlorohydrique chloré."

Mr. Phillips is now the *chief director* in the great establishment of Pelletier of Paris, and his high reputation as a manufacturing chemist, is a sufficient guarantee that the article sent is pure, and of the first quality.

Prepared, by the reports contained in some of the French journals, to find in this agent the much looked for *efficient* yet *harmless* local anæsthetic, I must confess that my disappointment was great when I discovered, by some experiments, that, in my hands at least, it failed to accomplish the object for which it was applied.

The local impression, indeed, was not greater than that produced by *chloroform*, and by no means so decided as that occasioned by *ice*.

"*Proposition to establish a Lectureship on Dental Surgery in Medical Colleges.*"

The suggestions published under this head, have, as I might naturally expect, attracted the notice and met the condemnation of the "Journal of Dental Science," whose senior Editor is the "Professor of Principles and Practice" in the Baltimore College of Dental Surgery; and while I desire that the merits or value of my proposition, to the community and to the profession, may be fairly judged by the parties truly concerned in its utility or otherwise, I design to take only such part in the discussions it may provoke, as seems necessary to make myself understood. This duty performed, I leave the proposal, be it what it may, to take care of itself, with no more vanity, interest, or ambition about its adoption than becomes a plain man, when he honestly contributes his thoughts with the hope of being useful.

I imagined that any one at all familiar with the subject, on reading the paper referred to, would perceive that it did not attempt to set forth *the manner* in which the plan is to be carried out; justly leaving this to be taken into consideration by Trustees and Medical Faculties—"*in such form as may seem most proper to their own judgments.*" But the absence of details or "reasons" from me, by which to prove the practicability of my proposition, appears to be considered by the Professor as *prima facie* evidence that it is impracticable. It is very true I did not deem it necessary to give reasons "*showing that Dental Surgery could be taught by an adjunct Professor equally as well as by five instructors, who are now found necessary:*" it will be for the Trustees of medical colleges to determine these questions, should they see fit, to inquire through the medium of competent and disinterested testimony, how far the proposed Lectureship would answer the objects contemplated, or whether it would be advantageous to the public, and consistent with the best medical and dental education.

There is no language of mine from which the Professor could rightly infer the thoughts he attributed to me, when he says:—"*Yet Dr. Gardette thinks that all this work can be done equally as well by an adjunct Professor, who shall be attached to the Medical Faculty, lecturing when they will give him an opportunity—to students when they will give him a hearing.*" I neither think nor expressed any such absurdity; the *work* to be done by a dental student I said nothing about, but am of opinion it should be executed in the office or laboratory, and under the superintendance of his private preceptor, and it is there that careful, judicious operators will be made, whether they listen to Lectures in Medical or Dental Colleges.

I have suggested no scheme "*according*" *to which all the medical students must be instructed in dentistry, nor have I said that* "*dental students are to be thoroughly instructed in all the branches of medicine.*" The abstracted Professor, I must suppose, imagines these statements, (I certainly did not make them,) for the mere sake of pointing out their erroneous character; and by means of these suppositious facts he makes for me the following arithmetical calculation:—"*In four months he would lecture about a hundred times; or during a hundred hours, being divided*

into working days, would give ten days entire to dentistry; in which time all necessary information is to be imparted—all necessary skill acquired." To attribute opinions so perfectly and ridiculously ignorant to me, seems anything but consistent with the expressions of regard or just claims to respect, with which the Professor opens his review. I am at a loss to explain so absolute an incongruity, unless by supposing that my "*strange and startling proposition*" produced consternation in the Professor's mind, in the midst of which he seems to have mistaken me for a Dental College; a singular mistake, but which affords the only mode of interpreting the term "*suicidal*" which he applies to my proposition, reproaching me with making it "*at a most unfortunate time*" for Dental Colleges, and endeavoring to show that its influence was fatal to *their* growing prospects.

Now with reference to the supposed injury done to Dental Colleges by my suggestions, the Professor indulges in long lamentations about the "*past degradation*" of the Dentist's profession—his "*sullen and fretful isolation*"—when "*all was dark and hopeless.*" In these strains, my good friend is more poetical than precise or historical; and I cannot subscribe to this and much similar clamor, by which one is to suppose that Dentists and Dental Surgery were good for nothing at all—had no claim to sympathy or respect, until ten or twelve years ago when a Dental College came into existence. The Professor-Editor seems to forget the lives and labors of valuable men, some of whom are yet among us, while the memories of others are justly cherished by their fellow men, to whom we owe the progress of Dental Surgery in the last forty or fifty years; it is in vain, if not vanity, to suppose that such professional improvement is the spontaneous growth of the present time, instead of a gradual consequence of individual mind, skill, and example, belonging to the past. Even our humble selves—you and I, my dear Doctor—have done some service in the march of improvement, without having had the benefit of either Lectures (except medical ones) or Dental Colleges: and there are several names we could mention of past and present times, who, without such advantages, have done honor to their profession and the communities of which they were members.

The very term "*profession,*" according to the Professor, would seem to have had no existence or application to the Dentist, ex-

cept through the medium of *Professors;* he says, "*at this period, when all was dark and hopeless,* (12 years ago!) the idea was conceived of establishing a Dental College, and *'professionalizing'* Dental Surgery." . . . . . "A beginning had been made. *A profession of Dental Surgery*, standing upon its own merits, respected for its own sake, had *been recognized* in the country." The Professor cannot surely and seriously mean to say that the establishment of a Dental College was the *beginning* of Dental Surgery! that the occupation of the Dentist was not "*professionalized,*" or recognized as a *profession*, until embodied and represented by a Professor Dentist in a Dental College!

But to return to the suggested change in that portion of a Dentist's education which may be advantageously pursued in a public school, and which I have taken the liberty to think can be better accomplished through Lectureships in Medical than in Dental Colleges.

To set forth the details and principles that are to govern in any new system or proposed improvement in professional education, is an important and responsible duty; and ere such a suggestion is acted upon by the Trustees of prominent Medical Colleges, they will no doubt carefully examine into the objects and practicability of the measure. With the aid of their Medical Faculty, and men having knowledge and experience as Dentists, they would establish such a curriculum of studies, as would insure the best results; and will not overlook the fact that private instruction in the office of a Dentist of standing, during a period specified (as is required of the medical student) should be among the conditions for graduating.

The Professor is right in supposing I did "*not contemplate that any instruction in practical Dentistry should be given in the Medical Colleges,*" and of course it was from private teaching by a preceptor that I expected this "*essential part of a Dentist's education*" would be obtained; for I think this the *only* mode in which it can be acquired with that degree of judgment and safe manipulation which will command confidence. And yet I can see no good reason why the surgical clinics of our Medical Colleges, (in the event of a Lectureship on Dentistry) should not embrace many operations on the living teeth. Mechanical Dentistry—or making artificial teeth, seems the only branch

excluded of necessity, from Medical Colleges, and this would not be undergoing any great *descent*, as the Professor well knows, should it continue chiefly in the goldsmith's shop.

I can foresee none of the calamitous results to medical character or Dentistry predicted by the learned Professor, in the event of Lectureships on Dental Surgery in Medical Colleges; but on the contrary, I firmly believe that such a connection would tend to elevate the Dentist and his profession, benefit the practice of medical men under many circumstances, and advance the interests of suffering humanity. That many practicing Dentists in our country, are of this opinion, and are not satisfied with the establishment of separate Colleges for Dental Surgery, may naturally be inferred from the complaint of the Professor, that "*If half the students of Dentistry now in the offices of Dentists, should be sent to the Dental Colleges, then would they be able to take rank,*" *&c.*

It is common with Dentists of high standing, to require of their pupils that they attend medical lectures, and take the degree of M. D.; and this is the case *even since the existence of Dental Colleges.* It may therefore be reasonable to suppose that the Lectureships suggested in Medical Colleges would meet the approbation of the best practising Dentists of the country, and that their students would gladly attend such lectures. I cannot see the wide difference that would exist between C. A. Harris, M. D., Professor of the Principles and Practice of Dental Surgery, in the Washington Medical College, or the University of Pennsylvania, and C. A. Harris, M. D., Professor of Principles and Practice, in the Baltimore College of Dental Surgery. The learning, the industry and eloquence would be the same in both positions; but I think these qualifications would be displayed in the former case to the students *from all the Dentists' offices*, while in the latter, after "*twelve years*" of uphill work, "*endurance and toil,*" he complains that "*very few of the educated class of Dentists encourage the undertaking, while very many deride it, and use all their influence to keep students away.*"

The reproach of the Professor that my proposition has been "*made at a most unfortunate time,*" is followed by an attempt to show that the Baltimore College had just succeeded; that

"*opposition was beginning to grow weaker—sympathy stronger,*" and that "*a few years would bring about a general ascent from degradation.*" So far as regards the time chosen for giving publicity to my proposition, the Professor is neither just or generous—for the probable influence of such a proposal, if it have any, upon the prosperity of the College, would certainly have been greater when it was in its infancy, than now. Sentiments of respect and kindness for gentlemen connected with, or interested in the first Dental College, and a willingness to see the scheme tried, prompted myself and others to lend it aid and not condemn precipitately.

It has been stated to me (and the Professor says, "*the truth must be told,*") that the Baltimore Dental College has been chiefly sustained thus far in its feeble existence by the talents and influence of its *medical* Professors, and that one of these, who has been the main prop of the Institution, has of late years designed to abandon it as an expensive unsuccessful attempt. This state of things, when added to the Professor's acknowledgment, that less than half the students in Dentists' offices would suffice to make the Dental Colleges prosper, and that in twelve years they had not obtained a sufficient share of that amount of patronage, would seem to render this a fit and proper time to suggest some plan of Dental education that will be more acceptable and more successful.

In conclusion I beg to remark, that I did not expect to be called upon to prove the *practicability* of my proposition; it was its propriety and expediency which I feared might not so readily be established in the minds of those who have thus far neglected the speciality of the Dentist. But if Dentistry is "*a regular branch of medicine,*" (as Professor Bond justly remarks) "*in which relation only it can be regarded as a scientific pursuit, and the practice of it esteemed a profession,*" then the proper place for having its principles taught, is a Medical College, and the proper title or diploma of its representatives should originate from the same source as do those of other branches of medical science. *Dental* College seems scarcely to be the correct name for an Institution mainly sustained and conducted by medical teachers, and until a Faculty can be formed entirely of Dentists, the title no less than the scheme is inappropriate.

The Baltimore Professor says that the plan of Lectureships on Dental Surgery in Medical Colleges "*is not a novel one,*" because "*thirty-five years* ago the late Dr. Hayden "*delivered a course of Lectures on Dental Surgery in the University of Maryland, but the experiment was unsuccessful.*" I take no especial pride in the originality of my proposition, and if in reality a similar one was promulgated by so learned and distinguished a Dentist as the late Dr. Hayden, it is the more worthy of consideration from the Trustees of Medical Colleges.

E. B. GARDETTE.

NOTE.—Since writing the above, some one has kindly sent me a copy of the first number of the "New York Dental Recorder," in which my attention is called to a very sensible communication under the signature of "*A.*" and having for its title, "*An appeal to the Medical Profession in behalf of Dental Science.*" This paper embodies the same thoughts and embraces a plan of Dental education very much the same as that I propose; I had never before seen or heard of the article referred to, and in truth did not know the existence of the Dental Recorder so early in its career. I freely yield to the priority of the writer's suggestion, and only regret that his anonymous character, or the abandonment of his scheme, has denied it the importance and influence to which I think it justly entitled.

Mercury by Inhalation. By H. J. RICHARDS, M. D., Philadelphia.

The following curious fact was communicated to me in conversation recently, and has seemed to me worthy of publication. The recent practice of M. Ricord,—rather the testimony given in his late work, of the efficiency of mercury by *fumigation*—the favor with which it was regarded by Mr. Abernethy, associated with this Indian testimony, all point to a possibility that these methods of exhibition may develope more properties in this important medicinal substance; besides furnishing us with a resource in the method of its administration, that may find its occasion.

I have been informed by a gentleman of intelligence, who has

resided for a long time in China and Manilla, that mercury, which is there regarded as a specific in the severe forms of hepatic disorder incident to the climate, and leading to its employment to an extent that would be considered extravagant by our European notions, is constantly exhibited in the following novel and peculiar manner. The black oxide is introduced into the manilla cheroots, and being inhaled, is thus presented in the form of vapor to the most absorbent surface in the body, speedily manifesting its constitutional effect. The only difficulty existing is the inability of the physician to regulate the amount of effect. By intelligence on the part of the patient, however, this is obviated; whereas its advantages are such as to obtain for it the preference, in many cases, over the ordinary method. *It certainly is a speedy plan of producing salivation.* I mention this fact as it is interesting in itself, and may suggest other applications of the same principle.

BIBLIOGRAPHICAL NOTICES.

New Remedies: with Formulæ for their administration. By Robley Dunglison, M. D., Professor of the Institutes of Medicine, &c., in the Jefferson Medical College of Philadelphia. *Sixth Edition, with extensive additions.* 8vo. pp. 755. Philadelphia. Lea & Blanchard.

In noticing the sixth edition of so popular a work as the "New Remedies," it is sufficient for us to enumerate the additions which have been made to it since the publication of the fifth edition. "The last few years," as Dr. Dunglison well observes, "have been rich in valuable gifts to Therapeutics;" and in the following list of therapeutical agents, now introduced into the work, will be recognised some of the most valuable and approved remedial resources in actual use:—Adamsonia digitata, Benzoate of Ammonia, Valerianate of Bismuth, Sulphate of Cadmium, Chloroform, Collodion, Cantharidal Collodion, Cotyledon Umbilicus, Sulphuric Ether, Strong Chloric Ether, Compound

Ether, Hura Braziliensis, Iberis Amara, Iodic Acid, Iodide of Chloride of Mercury, Powdered Iron, Citrate of Magnetic Oxide of Iron, Citrate of Iron and Magnesia, Sulphate of Iron and Alumina, Tannate of Iron, Valerianate of Iron, Nitrate of Lead, Lemon Juice, Citrate of Magnesia, Salts of Manganese, Oleum Cadinum, Arsenite of Quinia, Hydriodate of Iron and Quinia, Sanicula Marilandica, and Sumbul.

An Index of Diseases, to which the remedies are applicable, has also been added to this edition, and will be found useful.

Report of the Committee on the Statistics of Calculous Disease in Ohio, made to the Ohio State Medical Society. By E. H. Davis, M. D.

This pamphlet presents the results obtained by the author, in an attempt to determine the influence of geological formations in the State of Ohio on the development of calculous diseases. The State of Ohio being nearly equally divided between the blue and cliff limestone formations on the west, and the sandstone or coal-bearing series on the east, affords an excellent field for the accumulation of facts bearing upon this interesting point. Dr. Davis has been able to collect reports from portions of the State, containing rather more than half its population, the average period of observation being fifteen years. They show a striking preponderance of calculous diseases in the limestone region. The proportion of cases here is found to be "1 case per annum to about 60,000 inhabitants," while "in the sandstone and coal series, we have 1 case per annum to 238,000 population, showing the disease to be nearly four times more frequent in the limestone formation than in the coal series."

Dr. Davis is led to infer that the *blue* limestone district is most favorable to the appearance of calculous concretions—although he deems his reports scarcely numerous enough to warrant positive conclusions in this particular. The blue limestone formation of Ohio is the same as that of Lexington, in Kentucky, the residence of Dr. Dudley, who, we believe, has performed the operation of lithotomy some two hundred times—a fact that strongly supports the inference of Dr. Davis as to the comparative frequency of calculous affections in the district in question.

Dr. Davis hopes to be able to extend his valuable statistics on this interesting hygienic question, and invites the fuller cöoperation of the profession both in Ohio and throughout the entire valley of the Mississippi. Communications on the subject are to be hereafter directed to him at New York.

Intermarriage, or the mode in which, and the causes why, Beauty, Health and Intellect, result from certain unions, and deformity, disease and insanity, from others. Demonstrated by delineations of the structure and forms and description of the functions and capacities which each parent, in every pair, bestows on children—in conformity with certain natural laws, and by an account of corresponding effects in the breeding of animals. With eight illustrative drawings. By ALEXANDER WALKER. Philadelphia: Lindsay & Blakiston. 1851.

The lengthy title given above almost serves the purpose of a table of contents to a work, whose main object is the announcement and illustration of a natural law. According to this law, one parent gives to the progeny the forehead and organs of sense, together with the nutritive organs contained within the trunk; while the other gives the backhead and cerebellum, (or organ of the will, as the author calls it,) together with the locomotive organs, comprising the exterior of the trunk and the whole of the limbs.

The author is evidently a careful observer and a profound thinker, and has presented us with a vast amount of information derived both from man and the inferior animals. He has aimed to be useful by pointing out how bodily deformities and mental infirmities may be forestalled; and how marriage among blood relations (which have always appeared to us a violation of the laws of nature) tends to the degeneracy of the offspring. He also shows how, by carefully assorted marriages, the means of improving general organization and beauty of countenance, as well as mental and physical vigor, are, in a great degree, under the control of man; this is familiar to every cattle breeder, who knows that breeding in-and-in, as it is called, is always attended by degeneracy in the offspring. Although not strictly a medical work, we cannot refrain from commending to the perusal of the

profession the little volume of Mr. Walker, as containing much that is valuable in a hygienic point of view.

Minor Surgery; or Hints on the Every-day Duties of the Surgeon. By HENRY H. SMITH, M. D.; Assistant Lecturer on Clinical Surgery in the University of Pennsylvania, &c. &c. Third Edition, with numerous additions; illustrated by 247 engravings. Philadelphia: Barrington & Haswell, 1850.

Readiness and promptitude of action are among the most valuable attributes of the skilful surgeon, one of whose distinguishing characteristics is the dexterity with which he accommodates himself to circumstances, and bends them to his own immediate wants. To all who would obtain these desirable qualifications we commend the little work whose title stands at the head of this notice. It offers itself to the student and practitioner in its third edition, with much additional matter in the shape of descriptions of the duties of assistants at operations; the mode of conducting etherization; the mechanical treatment of club feet; the cure of aneurism by compression; the catoptric diagnosis of cataract; and similar subjects likely to prove of daily utility to the practitioner. It is well printed and handsomely gotten up.

Quarterly Summary of the Transactions of the College of Physicians. Philadelphia; Lippincott, Grambo & Co. Nov. 1850, to Jan., 1851, inclusive, and Jan. to April, 1851, inclusive.

We are pleased to welcome the Transactions in their new dress, as well as to learn that arrangements have been made to give them a more extended circulation. A new series is commenced with the Quarterly No. for January, which will be issued regularly, and may be obtained from the publishers at the low rate of one dollar per annum. The Nos. before us are handsomely printed, and illustrated with lithographic and wood engravings, and contain the medical reports, essays and debates, that occurred during the sessions of the college in the quarter prior to their publication.

On the Theory and Practice of Midwifery. By FLEETWOOD CHURCHILL, M. D., M. R. I. A., &c. &c. With notes and addititon by D. FRANCIS CONDIE, M. D. Secretary of the College of Physicians, &c. &c. With one hundred and thirty-nine illustrations. A new American from the last improved Dublin Edition. Philadelphia; Blanchard & Lea. 1851.

We take great pleasure in announcing to our readers a new and improved edition of this standard work on obstetrics, made more valuable by the notes and additions of Dr. Condie, whose past experience in this department entitles him, justly, to be heard as an authority. Dr. Churchill's works are so well and so favorably known in this country, as to make more than a bare announcement of a new edition unnecessary. It is gotten up in the usual handsome style of the publishers, and will prove a welcome and faithful friend to the profession.

Medical Commencement of the University of Pennsylvania, with a Valedictory Address, by W. E. HORNER, M. D., Professor of Anatomy; April 5th, 1851.

Charge to the Graduates of Jefferson Medical College of Philadelphia, by T. D. MÜTTER, M. D., Professor of Surgery; March 8th, 1851.

Charge to the Graduates of the Medical Department of Pennsylvania College, by W. DARRACH, M. D., Professor of the Theory and Practice of Physic; March 6th, 1851.

The season of "commencements" is over, and the flocks of graduates are distributing themselves over the wide spread face of the country, freighted with the good advice and kind wishes of their quondam teachers! What conscientious and upright men they would be, did they but act up to the counsels so lavishly bestowed upon them! But, alas, the "*auri sacra fames*," and the jealousies of professional success, too often make *self* more prominent in the mind, than the great mission on which they have embarked.

Some few extracts from these various addresses, above named, are all that our limited space will allow, but these will serve to show the sageness of the counsel, and the warmth of feeling with which they abound.

"Indolence in the early years of professional life is by all means to be avoided; a pre-occupation of the public attention by seniors and by men of acknowledged skill, will necessarily leave the young practitioner in obscurity and without much reward. Many men are irrevocably discouraged by their deep sense of these disadvantages, and as they cannot get an immediate reward, have not the force of character to labor for the emoluments which come in, only after the expiration of ten or of fifteen years. The difference between individuals is strongly marked in this respect, because there are some who, notwithstanding this tedious postponement, yet consent to labor on, and to do so even diligently, under a strong hope that their reward must at length come. In surveying the state of our profession here, elsewhere in the cities of the United States, and in the largest of cities in Europe, as London and Paris, it will be found that the most distinguished and able members of the time are those choice spirits who in early life devoted days and nights to study; and to threading obscure alleys, the abodes of sickness and of wretched poverty; but having now passed through that probation, they are enjoying all the advantages and dignity of their high calling."

Speaking of the subject of medical education, and the conflict of opinion on this subject, Dr. Horner remarks:

"I am not prophet enough to foresee the final result of this struggle of antagonisms, but I trust it may be propitious to the cause of science. I at least have the consolation of representing here to-day an Institution which, the first in the country in its period of organization, has also led the way in the efforts to advance medical education—and while other institutions decline going counter to a popular current, is herself endeavoring to stem it, and, if possible, to give it a better direction. Whether we are to succeed or to fail in this effort, time has yet to determine. We would cordially invoke a greater number of sister schools to lay aside their fears and to co-operate with us. There will, I have no doubt, be a temporary sacrifice to them, as with us, but most probably an increased benefit will subsequently result. A sense of discrimination by the public may finally prevail, so as to understand that while there are many institutions having the right of issuing diplomas, so there must be other guarantees of proper education besides the mere exhibition of a parchment."

Again, in relation to short courses, and the influence that the profession at large is able to exert upon the community, he justly observes:

"We have heard of a medical education for California. Suited, however, as California may be for rapid growth of every kind, we doubt much whether what may suit California, will also be acceptable everywhere else. Ample as that market may be for doctors of all kinds, it is probable that it will soon be overstocked, and as all who wish an education for it, cannot be accommodated there, the overstock may be in some difficulty to find a congenial soil elsewhere. But, watchful observers exist even there, in the persons of experienced and educated physicians,

who, to a large extent, influence the public mind, and determine more or less upon questions of personal merit."

The following brief notice of himself, as a matter of medical history, possesses interest to all to whom the distinguished author is known:

"With this address I close a circle of forty courses of lectures in the University of Pennsylvania. The forty years which they represent, have been in every way the eventful ones of my life: they include education, business, wife, children and friends. My connection with this distinguished school was first as a student; your partialities, too little merited, elevated me at an early period of life, to the honorable distinction of a place in its medical faculty. I became finally the successor in full of a Shippen, a Wistar, and a Physick, names too illustrious to need, at the present moment, further notice. I now find myself, though not very old, yet at a period of life when most men may look for retirement at a day not distant; either from the necessities of health, or in view of making place for the deserving who are close upon their steps. As this is moreover the last time in which I am likely, in the regular order of rotation, to perform an office similar to the present, I will take this only opportunity of speaking strongly, but with all respect to you.

"Let me then say, I trust that at no period, either while I am with you, or subsequently, the high principles which have hitherto governed this school may be abated; or that an honor suited only to minds of the higher cast of intelligence, shall be permitted to become a simple commodity, whose price of time and of labor is to be regulated by the freedom with which the supply may come from other quarters. As we have heretofore survived the influence of the latter policy from various directions, ever since my first connection with you, so may you survive it long after I am gone."

The charge of Dr. Mütter is an eloquent exposition of the aids and appliances by means of which success in professional life is most generally obtained: "I mean *honorable* success, for the mere acquisition of notoriety, or the accumulation of fortune, may most readily be reached by the possession of qualities directly the reverse of those with which every conscientious and virtuous physician should be imbued." Among these are enumerated: *a thorough medical education; habits of reasoning and thinking; a reverence for the art; honesty of purpose; discretion, self-respect, self-reliance, industry and perseverance, charity, ambition and patriotism*, all of which are enforced in the glowing language which no one knows better how to use. One sentiment we wish were more generally practiced: "A good rule is to refuse a certificate to every patent medicine or instrument,

for I hold that every honorable physician is bound to make public any discovery calculated to benefit his fellow man."

We have occupied so much space with the extracts given above, that but little is left, except to speak in terms of high commendation of the charge of Dr. Darrach, which urges the importance of other qualifications than mere medical attainments; these are medical discernment, compassion to the sick, medical devotion, and medical liberality. These are the jewels with which the armor of the physician is adorned, in the figurative language of the author. We present our thanks to each and all for the pleasure afforded in the perusal of their several addresses.

THE MEDICAL EXAMINER.

PHILADELPHIA, JUNE, 1851.

[The facts presented in the subjoined statement, have been submitted to us, with a request that we would embody them in an editorial notice, with the assurance that they have the approval of both parties. It affords us much pleasure to comply with this request, and to learn that this correction of unintentional mis-statements terminates a regretted controversy, between gentlemen whose previous relations had been uninterruptedly cordial.—EDS. EXAMINER.]

EXPLANATIONS AND CORRECTIONS.

Dr. Jackson, in his "Review of the Memorial of Dr. John Bell to the Trustees of the University of Pennsylvania," writing in haste, and under what he felt to be no small provocation, was betrayed into some errors of fact, which it is desirable to correct. These corrections are due, in justice, to Dr. Bell, while, at the same time, they do not touch Dr. Jackson's reputation on any point in previous controversy. They are now made with the knowledge and assent of both these gentlemen.

Dr. Jackson (in his "Review") states that "Dr. Bell was a lecturer for about ten years in the Philadelphia Medical Institute." Dr. Bell was, in fact, a lecturer in that institution dur-

ing an uninterrupted period of *nineteen* years, in addition to *two* years as a member of the Association, before it was organized under the title of the Medical Institute.

Again, it is stated, in the "Review," "He [Dr. Bell] was for some six or eight years a lecturer on the same subject, [the Institutes of Medicine."] He was, actually, a lecturer on this subject *seventeen* years, not to speak of *two* years antecedently, in which he lectured on Physiology and Hygiene. During sixteen years of this period, he gave, also, lectures on Medical Jurisprudence, in connection with those on the Institutes of Medicine.

Dr. Jackson's memory is at fault, when he alleges that—"Alterations were made in the management of the association [the Medical Institute], in order to favor Dr. Bell and to place him, at a sacrifice to his associates, on a pecuniary footing with themselves." Doctor Jackson's subsequent explanation of this averment is, that "In the first years of the courses of the Institute, the lecturers had the privilege of sending their private students free of charge to the Institute," but that, subsequently, the rule was altered, so as to require the fees of these students to be "paid into the treasury of the Institute and a dividend made equally." Dr. Jackson's recollection of the change, as here represented, is, that it was to favor Dr. Bell, the number of whose students was, Dr. J. thinks, small, "while the other lecturers had numerous pupils."

The change actually made, as we learn by reference to the records of the Institute, was, in requiring each lecturer, who had a private, or as the term, on the records, is, "perpetual" student, to pay into the treasury of the Institute, one hundred dollars, by which he, the student, acquired the privilege of attending all the lectures and examinations in the Institution, during the entire period of his medical studies up to the date of his graduation. Each lecturer was allowed to receive, as before, the fees for three annual students, who entered with him for the year, or who were alloted to him, if they did not make personal application. The other students of the Institute were they who enrolled themselves at the beginnning of each scholastic year, and took a ticket, for this period, for the full course, that is for attendance on all the lecturers. The money received for this ticket had always been de-

posited in the treasury for equal division among the lecturers. Whatever may have been the motive for the change in the rule of the Institute, respecting private pupils, it is very certain that the one alleged by Dr. Jackson, could not have been, at all, a determining one. This will be apparent when we state that Dr. Bell was less in a position, at the time, to require any special legislation, in this matter, than most of his associates. The new rule was adopted in March, 1830. Now, the records of the Institute show, that Dr. Bell, in the year preceding, or 1829, had more private pupils, in addition to his three annual ones, than any other member of the Institute except Drs. Chapman and Mitchell. His private pupils, in that year, numbered *four*; those of Dr. Horner, three; of Dr. Dewees, two; of Dr. Jackson, two, and of Dr. Thomas Harris, one. Dr. Hodge does not appear to have had any. In the year 1828, Dr. Bell had *five* private pupils—Dr. Dewees, none.

There were great fluctuations in the number of private pupils, from year to year, in the offices of the different lecturers. It was thought that there might be more equality established for all, in this matter, and hence the new rule, which continued in operation to the time when the Institute was dissolved; with the modification, in later years, of requiring only seventy dollars from a lecturer for his private pupil; no engagement being made for winter examinations as before.

No favor was ever asked by Dr. Bell from his associates in the Institute, nor was any ever conceded to him, by these gentlemen, in the way of lightening his labors. The change in his position as a lecturer in the Medical Institute, three years before the association was dissolved, may be adverted to on the the present occasion. It was made at the request of Dr. Jackson and for his convenience. It consisted in Dr. Jackson's taking the *Institutes of Medicine*, and Dr. Bell *Materia Medica and Therapeutics*, so as, thereby, to allow of the former of these gentlemen to continue without interruption, during the summer session of the Institute, the lectures and their associated reading and study, in which he was engaged during the winter, in the University.

Dr. Bell acceded to Dr. Jackson's request, although, from its having been made only about a month before the opening of the lecture

session of the Medical Institute, he would be placed at a great disadvantage in beginning a course of lectures on a new subject, without time for preparation. It so turned out, however, that Dr. Bell succeeded in obtaining the approbation of the students and of other occasional auditors, who attended his lectures on Materia Medica and Therapeutics—during the three years which preceded the dissolution of the Institute, as it was then organized. The broad assertion in the "Review," that, "During the whole period, Dr. Bell was attended by a mere fraction of the class," must be met by direct denial. If ever applicable, it could only have been so during the time when Dr. Gerhard gave clinical lectures in the Blockley Hospital. Dr. G.'s hour was that of Dr. Bell's lecture, and the students very naturally preferred clinical to didactic instruction.

On this point, it is but justice to Dr. Bell to say, that, in the year 1837, he received an offer of the Chair of the Practice of Medicine in the University of Transylvania. The offer was made to him by a member of the Faculty of that school, immediately after the latter had heard Dr. Bell give a lecture, (one of his regular series,) in the Medical Institute. The Transylvania professor was, himself, of the highly rhetorical school of lecturing, and his manner, in this respect, must have been in strong contrast with the plain style of composition and delivery of Dr. Bell.

At a subsequent period, Dr. Bell received an offer, on the part of the Faculty of Franklin Medical College, of Philadelphia, of the Chair of the Practice of Medicine in that Institution, which had been left vacant by the resignation of Dr. Clymer. The fact is noted here, because two of the professors of the college had been associates of Dr. Bell in the Medical Institute.

Dr. Jackson, after making the general assertion, already disposed of, that Dr. Bell had been specially favored by his associates in the Institute, at a pecuniary sacrifice to them, adds: "At last those who had the most work to do found the compensation so trifling, that the organization of the institution was dissolved." The fact of dissolution and its chief cause are correctly stated; but if we were to ask,—who had the most to do? the reply must necessarily be, Dr. Bell, inasmuch as he was the only member of the Institute, at the time, who had not an assistant to lighten his labors. In the last session of the Institute,

there were no less than thirteen gentlemen engaged in teaching its several branches—seven in number. Even were we to suppose a deficiency on the part of any one of the original seven lecturers, this would be compensated by the numerous assistants or adjuncts, some of them of marked ability, all of them fully competent to perform their share of the duties assigned to them.

The gradual decline of the Institute classes may have been produced by various causes. The most obvious one was the diminished interest which the Professors of the University, who constituted a majority of the associated lecturers, took in the Institute; as evinced by the fact of their failing to give the same time and attention to it, which they had given in its more flourishing days. We cannot be accused of detracting from the merits and zeal of those gentlemen who were associated with the Professors in the business of summer teaching, when we express our belief, that the great attraction for the students who enrolled themselves in the Institute classes, was the privilege of hearing these latter repeat and enlarge on their winter lectures. The students believed that by this means they would, as, in fact, they did, obtain increased facilities for reaching the doctorate with credit. In making this remark, we would not have it implied that we advocate a participation in summer teaching by the Faculty, or members of the Faculty, of any regularly incorporated Medical College, in which a winter session is held.

On another topic Dr. Jackson has allowed himself to make a grave charge against Dr. Bell. When speaking of the latter as "ambitious of the reputation of authorship," Dr. Jackson says: "But when the principal alteration and addition consists in the erasure of the author's name on the title page, and the substitution of his own, some other appellation might be given to the act." Dr. Jackson could not have seen the work to which we supposed, and now know, he refers; and he must, we are sure, deeply regret that he has been betrayed into so serious an accusation against another person, without his having assured himself that there were, at least, some grounds for making it.

There is only one work under Dr. Bell's name, the title of which makes a near approach to that of another author. It is the *Practical Dictionary of Materia Medica.* Mr. Brande's work bears the title of *Dictionary of Materia Medica and Practical Pharmacy.*

The title page of Dr. Bell's volume exhibits, quite conspicuously, an acknowledgment of its being on the basis of Mr. Brande's. Hence, at the very first glance, the reader is apprised of the source from which the American author might be supposed to derive his chief materials. But, a still more precise and comprehensive explanation, on this point, is given by Dr. Bell in the Preface, in which, also, he assigns the reasons why Mr. Brande's name could not be retained on the title page, without positive injustice to this gentleman. Dr. Bell made, not only many curtailments of the English work, but, also, many additions, and, still more, organic changes in it, so that its chief features were greatly altered.

The additions made by Dr. Bell, as stated in his Preface, "are interwoven, in nearly every article, with the summaries of Mr. Brande; and often, without their taking up much additional space, they give a different complexion to the opinions which he had advanced, but one which is more in consonance with clinical experience. Some articles which had a place in the English work have been replaced, on account of their meagreness and incompleteness, by other more extended ones, prepared by myself. Of these I may mention *Emetics*, *Emmenagogues*, *Epispastics*, *Hirudo*, and *Iodinum*, including under this latter the combinations of iodine with *carbon*, *sulphur*, *arsenic*, and *mercury* and *arsenic*, none of which were noticed by Mr. Brande. To the articles under the heads of *Antimony*, *Ferrum*, *Plumbum* and *Zincum*, the additions have been considerable, either in their novelty or amount, as compared with the original copy. Quite a different view of the therapeutical powers of antimony is given from that advanced by Mr. Brande. Neither the *lactate of iron*, nor the *carbonate*, nor *iodide of zinc*, was mentioned by him; and the remarks on the disease caused by the poisoning of lead, belong to the American work." Among the additions introduced by Dr. Bell, are twenty-eight articles of the indigenous Materia Medica of the United States.

While specifying the retrenchments which he made, such as of chemical details, diagrams, and of botanical descriptions of plants and their ultimate analysis, Dr. Bell takes care to point out to the reader in what respects his work is on the basis of Mr. Brande's, and to indicate the subjects retained, including

the extracts from Dr. Paris's *Pharmacologia*, and Dr. A. T. Thomson's *London Dispensatory*, which had been freely introduced into the English volume.

The Dictionary was brought out by Dr. Bell with less preparation that would otherwise have been given to it, owing to his having announced Mr. Brande's volume for publication in his *Select Medical Library*, on the strength of the interest of the subject, and the reputation of the author. When, however, he had an opportunity of perusing Mr. B.'s work, he soon saw that it would not answer; but as there was no other volume at hand to meet the requirements of the case, viz., republication at an early given date, he set about making what he deemed either necessary or desirable changes, and, in a measure, reconstruction, within the very short period allowed him for the purpose.

Were Dr. Bell not desirous of preventing farther controversy, he might retort, with some force and point, on Dr. Jackson, for the harsh strictures in which the latter has indulged in his "Review." But he forbears, under a belief, we might add, an assurance, that the feelings which prompted these strictures are no longer entertained; and he himself has no wish to yield to similar ones. With this understanding, and the explanations and corrections now made, Drs. Bell and Jackson are willing to let things take their old course.

May 19*th*, 1851.

DEATH OF SAMUEL GEORGE MORTON, M. D.

It is with the greatest regret that we record the death of SAMUEL GEORGE MORTON, M. D., which took place in this city, on the 15th of May last. Although in feeble health for many years past, and evidently holding life by a very slight tenure, Dr. Morton was in the discharge of his ordinary professional duties, up to the period of his last illness, which was of only four days' duration. His final attack was of an apoplectic nature; but he had long labored under considerable disease of the lungs and heart, as will be seen from the autopsy, appended to our notice, for the details of which we are indebted to Dr. Neill.

The death of Dr. Morton deprives our profession of one of its most distinguished members, and abruptly terminates a scientific career, which had become one of the brightest illustrations of our country. His reputation as a naturalist was diffused throughout the world, and we believe that no cotemporaneous American name was better known abroad than

his. His loss, in every respect to be lamented, will be particularly felt in the department of natural history, in which he was prosecuting the most interesting researches, when thus prematurely cut off, at the age of fifty-two, in the prime of mental vigor and usefulnese. In the relations of private life, no one ever conciliated more universal esteem and affection than Dr. Morton. He passed through the world, literally without an enemy, beloved and respected in all circles, everywhere deservedly regarded as one of the most amiable and irreproachable of men.

Dr. Morton was a native of Philadelphia, but, we learn, passed a portion of his youth in New York. He pursued his medical studies in the University of Pennsylvania, and in the office of the late Dr. Parrish. After graduating in the University of Pennsylvania, he spent several years in Europe, and received a second degree from the University of Edinburgh.

Returning to his native city, Dr. Morton rapidly passed into extensive practice, and, up to the time of his death, enjoyed a popularity second to none among the practitioners of Philadelphia. To the literature of his profession he made numerous valuable contributions. In 1835 he edited Mackintosh's Practice of Physic, which went through three subsequent editions; in 1833 he published an excellent original work on Consumption; and in 1849 an elaborate work on Anatomy.

Dr. Morton was for many years engaged as a teacher of medicine, and always ranked among our best lecturers. He gave several clinical courses in the Philadelphia Almshouse Hospital, and was Professor of Anatomy in the original organization of the Pennsylvania Medical College.

With this assiduous and unfaltering devotion to strictly professional avocations, Dr. Morton combined an enthusiastic and earnest pursuit of natural history, which earned for him a European reputation, and gave many splendid results to science. His first scientific publication was a work on the *Fossils of the Cretaceous Group*, in which, we believe, he described every example that has been found in N. America.

As far back as twenty years ago, he commenced collecting the materials, which he eventually embodied in the *Crania Americana*, the first work of the kind ever produced. This great work, published in 1839, immediately placed the author in the foremost rank among the cultivators of natural science, and was received throughout the world as a most valuable original contribution to ethnology. Its full importance is yet to be appreciated. At present it stands almost isolated; and its real value can be developed only when other races of men are studied and tabulated on a similar plan, and a comparison of the averages afforded,

enables us to determine the characteristic differences between the various races.

Dr. Morton spent many years upon the Crania Americana, and so careful was he to produce it free from inaccuracy, that, after the elaborate tables had been nearly completed—upon Mr. George Combe's pointing out a slight error in the starting point from which the measurements had been made—a new series was at once commenced, and carried through on the corrected method.

The *Crania Egyptiaca* followed the *Americana*. The presence of the integuments, however, and the bituminized condition of the crania, prevented any definite series of measurements.

The subject of hybridity occupied much of Dr. Morton's attention in the latter period of his life. At the time of his death he was pursuing his inquiries in several interesting and hitherto unexplored channels, connected with this important branch of natural history; and he had already collected a vast number of facts, and reached the solution of many obscure and previously unnoticed points. In this course of investigation, he was led into a close examination of the specific characters of the wolves of N. America, and the results of the crosses between the different species of wolves and the imported dogs,—a thread of inquiry which we know was developing most valuable conclusions in the highest walks of natural science.

In the midst of these absorbing scientific and professional labors, Dr. Morton found time to indulge a taste for poetry; and his occasional effusions show that he united a fine imagination, and refined appreciation of the beautiful, with his more solid powers and attainments. And all these noble intellectual qualities were graced with the crowning attractions of a most unaffected bearing, the gentlest manners, and a genuine cordiality and kindliness of disposition!

At the time of his death, Dr. Morton was President of the Academy of Natural Sciences, of which he had been a leading member for thirty years. He was also a Fellow of the College of Physicians, of the American Philosophical Society, and of numerous other learned societies, at home and abroad. The various associations with which he was connected in Philadelphia, united in every possible tribute of respect to his memory.

Post Mortem Examination of Dr. Samuel G. Morton.

On the day previous to his death, Dr. Morton was considered convalescent from an indisposition which his physicians had not supposed to be dangerous or alarming.

About the middle of the same day, a tendency to stupor was noticed, which gradually increased, and terminated in paralysis and death.

Present—Drs. Rodman, Beesley, Wistar, Pepper, McClellan and Neill.

Head.—The symptoms immediately preceding death, directed attention particularly to the condition of the brain, it being supposed that effusion had taken place in that organ. The arachnoid had lost its transparency, and no fluid was found in its cavity, but there was considerable serous effusion in the sub-arachnoid cellular tissue.

The pia-mater was very much congested, particularly on the left side, and from its vessels blood had been extravasated in several places. The basilar and vertebral arteries contained venous blood. Two small clots were found very nearly in similar positions upon the superior surface of each hemisphere; the anterior clot was the larger upon either side, and rested upon the upper surface of the anterior lobe. It consisted of about one drachm of blood, and had assumed the form of the sulci, into which it had insinuated itself. The brain itself was large and symmetrical. Its substance was firm and natural in every respect. The choroid plexus was equally congested with the pia-mater. Very little fluid was found in the ventricles.

Thorax.—The pericardium contained the usual amount of serum, and presented no appearance of disease.

The heart was large and flabby, and its tissue was pallid and somewhat softened. The cavities generally were dilated; the parietes of those of the right side were particularly thin, and contained some fibrinous clots. The ostium venosum of the right side was enlarged to such a degree that it could not have been closed by the tricuspid valve. The mitral valve was much thickened by soft fibrinous yellow deposit.

The arch of the aorta was dilated, and had some small patches of atheromatous matter deposited upon its internal surface.

The left lung was entirely useless for the purposes of respiration. It was contracted to a very great degree, and occupied but a small space in the upper portion of the thorax, where it was firmly bound down by the adhesion of the costal and pulmonary pleura, by which the cavity of the pleura was entirely destroyed. The congestion of the lung was so great, that it appeared dark-colored and solidified, although it contained sufficient air to make it float in water.

The right lung, which was unusually large, was congested and adherent to the walls of the thorax by adventitious bands of an old formation. The cavity of the pleura contained about a half pint of bloody fluid, probably the result of post-mortem changes.

These adhesions of the left pleura, and the contraction of the left lung were produced by an inflammatory affection of these organs, which occurred a few years since.

Abdomen.—The spleen was enlarged and very much congested. The tissue was so soft and pulpy that it readily yielded to pressure by the finger.

The liver was natural. The alimentary canal was not examined.

It can readily be understood from the above facts, that the immediate cause of Dr. Morton's death was *meningeal apoplexy*, resulting from that disturbance of the circulation which was manifested by the engorgement of the blood-vessels of the brain and lungs, but which was produced by dilatation of the heart.

AMERICAN MEDICAL ASSOCIATION, PRIZE ESSAY.

The committee, appointed under the resolution appended to the report on medical literature for 1849–50, have awarded the prize of *one hundred dollars, or a gold medal of equal value*, to DR. J. C. DALTON, of Boston, for his essay "*On the Corpus Luteum of Menstruation and Pregnancy.*"

FRANCIS G. SMITH, M. D., *Chairman.*

PROFESSOR MÜTTER sailed for Europe on the 24th of May, with the intention of spending the summer months abroad. We hope to receive from him an occasional letter for our columns.

SIXTH MEETING OF THE ASSOCIATION OF MEDICAL SUPERINTENDENTS OF AMERICAN INSTITUTIONS FOR THE INSANE.

This body met in Philadelphia, in the hall of the American Philosophical Society, on Monday, May 19th. It first met in Philadelphia in 1844, and is composed of the medical superintendents of the various institutions for the insane on this continent, and of those who have been so, and have attended meetings of the Association while in office. It has since held meetings in Washington, New York, Utica, Boston, and now again in Philadelphia.

It holds annual meetings, and examines critically any institutions for the insane, near its place of meeting, if invited by the proper authorities.

Its objects are to improve and advance the treatment of the insane; secure more extensive provision for all classes and a better style of buildings, and internal arrangements; and to make all the medical officers familiar with the results and modes of treatment of our best institutions.

The interest in the Association is on the increase, and it has already effected much good, with promise of future usefulness.

Thirty of the institutions in the U. S. and British Provinces are now connected with the Association, and it seems probable that, in a little time, no well conducted institution will be satisfied without having a representative at its meeting.

The following members were present,—Dr. Ray, of Butler Hospital, R. I.; Dr. Chandler, of Mass. State Hospital; Dr. Cutter, of Pepperill Institution, Mass.; Dr. Butler, of Hartford Retreat; Dr. Benedict, of N. York State Hospital; Dr. Earle, late of Bloomingdale Asylum, N. Y.; Dr. Nichols, of Bloomingdale Asylum, N. Y.; Dr. Ranney, of Blackwell's Island Hospital, N. Y.; Dr. Buttolph, of N. J. State Hospital; Dr. Kirkbride, of the Pa. Hospital for the Insane; Dr. Worthington, of Friends' Asylum, Pa.; Dr. Haines, of Philadelphia Lunatic Hospital, Blockley; Dr. Curwen, of Pa. State Lunatic Hospital; Dr. Fonerden, of Maryland Hospital; Dr. Parker, of South Carolina State Hospital; Dr. Hanbury Smith, of Ohio State Hospital; Dr. Patterson, of Indiana State Hospital; Dr. Higgins, of Illinois State Hospital; Dr. Jarvis, of Dorchester private institution; Dr. Smith, of Missouri State Hospital; Dr. Stokes, of Mount Hope Hospital, Ind.; and Dr. Morrin, of Quebec (Canada) Lunatic Asylum. Representatives from the Boards of Managers of several Institutions for the Insane were also present.

Invitations were received from the officers of the Mint, Blind Asylum, Deaf and Dumb, and Friends' Asylums, Pennsylvania Hospital, Pennsylvania Hospital for the Insane, Athenæum, &c.

In the absence of the President (Dr. Wm. M. Awl), Dr. Parker, of S. C., was appointed temporary chairman.

The permanent officers elected were as follows:—Dr. Luther V. Bell, of Mass., President; Dr. Isaac Ray, of R. I., Vice-President; Dr. Thos.

S. Kirkbride, of Pa., Secretary and Treasurer. Owing to the absence of Dr. Bell, Dr. Ray presided.

Dr. Awl having resigned his place, complimentary resolutions were passed, expressive of regret, and a high appreciation of his long and valued services among the insane.

A number of papers of importance were read during the session, which elicited much discussion; several of these will be published. Among them was one by Dr. Galt, on treating insane patients in buildings where there are those afflicted with other diseases. One on the use of stramonium in the treatment of insanity, by Dr. Cutter. One by Dr. Curwen, containing a manual for the use of attendants in Hospitals for the Insane. A valuable and important paper, on the course to be pursued by medical witnesses when called into Court, was read by Dr. Ray, and ordered to be published, at the special request of the Association, as containing the sentiments of the Association on the subject.

Dr. Earle read an account of many European institutions, not generally known in this country, and visited by him two years ago.

Dr. Kirkbride, from the Standing Committee on the construction of Hospitals for the Insane, read a report, embracing 27 propositions, on the subject, which were fully endorsed by the Association, and will be published in our next number, as the sentiments of the body. Dr. Morrin read a paper on Typho Mania; Dr. Chandler one on restricting Hospitals to receiving patients of one sex only. Dr. Nichols presented a paper, prepared by Dr. Williams, of N. Y., on Typho Mania; Dr. Jarvis one on the supposed increase of insanity; Dr. Kirkbride one on the best arrangements for kitchen, laundry, bakehouse, &c., in hospitals for the insane; Dr. Haines one on the warming and ventilating of Blockley Hospital.

Dr. Chandler read, agreeably to appointment, an obituary notice of the late Samuel B. Woodward, M. D., first President of the Association, and Dr. Nichols, one of Amariah Brigham, M. D., one of its Vice Presidents. These were highly interesting and will be published in the proceedings of the Association.

During the stay of the Association in Philadelphia, it was most courteously treated, and visited and examined critically the Pennsylvania Hospital for the Insane, under Dr. Kirkbride; Friends' Asylum, under Drs. Worthington and Evans; and Blockley Hospital, under Dr. Haines. The sentiments of the Association in reference to them are recorded in the following resolutions unanimously adopted, viz:

Resolved, That the members of this Association have visited and inspected the Pennsylvania Hospital for the Insane, under the care of Dr. Kirkbride, as well as the parent institution in the city of Philadelphia, with great interest and satisfaction, recognizing in both abundant evidence of the well directed benevolence to which they owe their origin, and feeling convinced that, if not unequalled, they are at least unexcelled.

Resolved, That upon a close inspection of the Friends' Asylum for the Insane, near Frankford, under the care of Drs. Evans and Worthing-

ton, the Association has much pleasure in testifying to the excellent condition in which they found that well conducted and now venerable institution.

Resolved, That the visit of the members of the Association to the Blockley Hospital and Lunatic Asylum, under the medical care of Dr. Haines has afforded them an opportunity of avowing their conviction that this establishment occupies a prominent position among the great charities which are the glory of Philadelphia. The cleanliness and comfort of its spacious apartments, the classification, order and freedom from restraint of its insane inmates, are commendable, and in all that relates to the supply of water, warmth, ventilation and drainage, this institution is not only in advance of similar pauper establishments, but even of some of our State Hospitals.

Resolved, That while the Association finds so much to admire and commend in this institution, and approvingly observes the astonishing improvements effected since its last meeting in this city, six years ago, it feels free to remind the Board of Guardians of its well known opinions on the importance of providing labor and spacious and constantly and readily accessible grounds for exercise for the Insane; especially as the institution possesses abundant means of accomplishing such advisable improvements in the extensive grounds and beautiful gardens connected with it.

Resolved, That our thanks are especially due to the Board of Managers and Guardians of all the Institutions above mentioned for their personal attentions and kindness shown us, on the occasion of the visit of inspection to which reference has just been made, as well as at other times, and for other proffered privileges of which want of time has prevented our availing ourselves.

Resolved, That our thanks are due and are hereby tendered to the President and Directors of the Girard College for Orphans, for the liberal manner in which the Association was entertained during its visit to every part of that magnificent and admirably conducted institution.

Resolved, That the Association returns its warmest thanks to Dr. R. M. Patterson, Director, and Franklin Peale, Esq., Chief Coiner of the U. S. Mint, for the highly appreciated privilege afforded us of inspecting every part of this establishment, justly renowned for the elegance and perfection of its machinery and arrangements, and for the admirable manner in which it is conducted.

Resolved, That the Association gratefully acknowledges the liberality and kindness which prompted the American Philosophical Society to tender the use of its hall for the meetings of the Association, and the use of which places us under special obligations to that body.

Resolved, That the thanks of the Association are also due to the Managers of the Pennsylvania Hospital for the offer of their beautiful Library Room for the meetings of the Association; to the officers of the Academy of Natural Sciences, for the privilege of making a very gratifying visit to that valuable institution; to the officers of the Pennsylvania Institution for the Instruction of the Blind; of the Pennsylvania Insti-

tution for the Deaf and Dumb; of the Athenæum, and of the University of Pennsylvania, for their courteous invitations to visit those institutions, which want of time alone prevented our accepting.

Resolved, That the Secretary be requested to furnish the daily papers of Philadelphia, with a copy of these resolutions for publication.

They also in a body visited several other public institutions.

Various important resolutions were adopted—among them were, one in reference to the proper provision for the insane poor; one on the effects of early education in producing insanity; and one relating to Miss Dix and her land bill.

Dr. Kirkbride resigned the post of Secretary to which Dr. Buttolph was appointed.

The committee for reporting the time and place of the next meeting, reported in favor of New York city, on the 3d Tuesday of May, 1852, which was affirmed by the Association.

Dr. Nichols, of New York, submitted a series of resolutions, tendering the acknowledgments of the Association to the different scientific and humane institutions of Philadelphia for their kindness and courtesy.

A resolution was adopted tendering thanks to Dr. Ray for the manner in which he had presided and discharged his duties.

Another resolution was passed, regretting the resignation of Dr. Kirkbride, and complimenting him upon the faithful performance of his duty.

A committee, consisting of Dr. Bell, chairman, and Drs. Haines and Smith, were appointed to report at the next meeting upon the subject of heating and ventilating.

Dr. Benedict offered a resolution to publish the proceedings of the Association in the Journal of Insanity and other journals.

Dr. Ray read a few remarks in reference to the reception of the Association in this city.

Dr. Bell made some remarks in relation to the organization of the Association in 1844; the doubts then entertained of its ability to sustain itself; and its increasing and now triumphant success.

At 12 o'clock M., the Association adjourned, *sine die*, May 23.

PENNSYLVANIA STATE MEDICAL SOCIETY.

The Annual Meeting of this body, composed of delegates from all the County Medical Societies in the State, was held in Philadelphia on Wednesday morning, 28th May, at eleven o'clock, in the Hall of the American Philosophical Society, south Fifth street, below Chestnut; the President, Dr. Wilmer Worthington, of Chester County, being in the chair. Drs. Patterson and Kerfoot, the Secretaries of the Society, having handed in their resignations, Drs. Remington and Morris were appointed to fill the vacancies. On motion of Dr. Jewell, Surgeons of the Army and Navy, and physicians of other States, now in the city, were invited to be present at the sittings of the Society.

The hours of sitting were fixed as follows: From 10 o'clock, A. M., to 2, P. M., and 5 to 7, P. M.

The following committee was appointed to nominate officers for the ensuing year:—Dr. Kerfoot, of Lancaster Co.; Dr. I. R. Walker, of

Chester; Dr. John Bascomb, of Mercer; Dr. J. H. Case, of Perry; Dr. C. D. Gloninger, of Lebanon; Dr. Elwood Harvey, of Delaware; Dr. Peter Nagle, of Berks; Dr. R. E. James, of Northampton; Dr. Joseph B. Ard, of Mifflin; Dr. James H. Stuart, of Erie; Dr. J. M. Gemmill, of Huntingdon; Dr. J. B. Rose, of Blair; Dr. E. Chichester, of Schuylkill; Dr. C. S. Baker, of Bucks; Dr. T. F. Betton, of Philadelphia county; Dr. H. Corson, of Montgomery; and Dr. James W. Kerr, of York. The Society adjourned at 2 o'clock, and reassembled at 5 P. M.

During the afternoon session, Dr. Hays presented reports from various county Medical Societies throughout the State, conveying information which was called for by the action of the State Society. The reports from Berks, Huntingdon and Blair counties embodied interesting accounts of the medical topography of these counties. The report from Blair also contained a variety of statistics of that county, as well as a list of the members of the County Society. The report states that there are eleven regular and thirteen irregular practitioners in that county. The Chester county report gave a history of the County Medical Society, and stated the number of members at forty. The Erie report complained of the opposition to the Society manifested in the county by several physicians of standing, and of the prejudice they had excited in the public mind against the movement. The Mercer report stated the number of members of the County Society at 22, and added that the number of irregular practitioners in the county was much larger, including homœopathists, hydropathists, Indian doctors, &c. The Huntingdon County Society stated in their report that there are 34 regular physicians in that county, besides 4 Thompsonians, and one homœopathist. In Northampton there are also 37 regular physicians, but there are 17 irregulars, of whom 9 are homœopathists. In Berks county there are about 68 practitioners of all kinds, 40 being regulars, and from 28 to 32 irregulars. The Delaware County Society reports a list of its members.

Dr. Isaac Parrish presented an interesting report on epidemics, embodying some valuable information obtained from Philadelphia and the adjacent counties, the reading of which was postponed.

Dr. Condie, from the committee on the subject, reported that a bill for the registration of births, marriages, and deaths, was passed by the Legislature at its last session, but that it had not yet received the signature of the Governor. In view of the latter fact, the report urged the passage of a resolution requesting the Governor to sign the bill. A motion being made that this resolution be passed, quite an animated debate sprang up relative to the merits of the bill.

Dr. Jewell stated that he had been informed that the Governor objected to some of the provisions of the bill, and that he would not sign it, inasmuch as those provisions would render it a dead letter upon the statute book. Dr. C. W. Parrish, of Chester county, strongly objected to the bill on the ground that its provisions imposed an onerous burthen upon the physicians who resided in rural districts, and one which it would be impossible to fulfil according to the strict letter of the law. Dr. Parrish also argued that the

phraseology of the bill was loose, untechnical, and inefficient, and said that he was glad to hear that the Governor would not sign the bill.

Dr. Condie, in defending the bill, said that, although this bill is objectionable, yet it ought to be accepted, because it would be very difficult indeed to procure the passage of another. He said that the entire project of registration had encountered the opposition of many physicians in western Pennsylvania, on the ground that it was unnecessary, and calculated to excite prejudice against the medical profession. The Doctor further stated that in the lower house of the Legislature, on a motion to refer the bill to a committee, every physician who was a member voted against it. Dr. Parrish, of Chester, stated that many gentlemen of that county were strongly opposed to the bill, and purposed getting up an agitation for its repeal if it received the Governor's signature. Pending the discussion, the Convention adjourned.

The Society decided to meet for the future in Sansom St. Hall, where ample accommodations were found for the delegates and the large auditory that was in attendance.

Thursday, May 29th.—The Society re-assembled at the Sansom street Hall.

The discussion on the subject of the registration of births, marriages and deaths was resumed, the question being on the passage of Dr. Condie's resolution. Dr. Atlee, of Lancaster, defended the bill, and urged that its signature should be favored; because, if it were incomplete, it could afterwards be amended. He said that he had no doubt that, if the Governor did sign the bill, it would be used as a ground of violent political opposition in the impending campaign. He added, that the Governor was an intelligent and liberal minded man, and he relied upon him to do justice to the subject after the canvass was finished.

Dr. Burroughs, of Lancaster, said that he had been opposed to the bill on account of its imperfections; but this opinion had been shaken by conversation with some of its friends. He, however, was still of opinion that if the bill, in its present imperfect state, received the signature of the Governor, under the recommendation of this Society, the latter fact would be used as an argument against its emendation, and would render its amendment impossible. The Doctor also urged that some of the provisions of the bill were too inquisitorial into family secrets.

Dr. C. W. Parrish, of Chester Co., offered the following substitute for the resolution, which was accepted by Dr. Condie, the mover of the original resolution:

Resolved, That we hail this first attempt in the State of Pennsylvania to accomplish so important a measure as a token for good; and, though the bill passed by the Legislature, in some of its details, does not fully meet the views and expectations of this Society, still it is earnestly recommended to all upon whom the duty of carrying out its requirements devolves, to comply promptly with all those requirements, as accurately as possible, in case the bill should become a law.

Dr. Emerson defended the provisions of the bill, and asked the objectors to be more specific in stating its defects. He also proceeded to show the value of the statistics which would be obtained by this law,

and, in illustration, quoted some very interesting deductions from the same kind of statistics in England and in Massachusetts.

Dr. Baskin, of Mercer county, argued in favor of the bill, as it was the best that could be got; and although it might possibly bear somewhat heavily on the rural physicians, yet they should sacrifice some little convenience in order to obtain the valuable information which would result.

The substitute, as offered above, passed without dissent.

Dr. Baskin then offered a resolution for the appointment of a committee to convey to the Governor the wishes of the society, and its action upon the subject, and that he be asked to sign it.

Dr. Atlee opposed the resolution on the ground that it was indelicate and improper, after the resolution which has already been passed.

A motion was made to amend it by making it the duty of the Secretaries to inform the Governor on the subject.

Dr. Jewell moved that the whole resolution and amendment be indefinitely postponed. Lost—ayes 23, noes 24.

The amendment was accepted.

A motion was made that the resolution be laid on the table. Lost—ayes 21, noes 26.

The resolution, as amended, was then adopted.

On motion of Dr. Emerson, the thanks of the Society were returned by resolution to Edward Armstrong, Esq., of this city, for his active and efficient exertions in procuring the passage of this bill.

Dr. Hays, from a committee on the subject, presented a report from Philadelphia, giving the following statement of the number of physicians in the city and county:—Regular physicians, 397; homœopathic, 42; hydropathic, 2; Thompsonian, 50; advertising doctors, 32; druggist physicians, 37; nondescripts, 42; total, 582. It is further stated that there are probably some omissions which would raise the total to 600.

The report of the committee on epidemics, offered by Dr. Parrish, of this city, was now taken up, and the accompanying county reports read seriatim. These reports were from Philadelphia, Delaware, Montgomery, Chester, Berks, Huntingdon and Blair. The report of the committee expressed their regret that so few county societies have reported on the subject, and they recommend that, as this is the first year of the attempt to collect such information, the county societies be requested to continue their committees from year to year, to collect information on the prevailing diseases of the several counties within the year 1851, with a particular description of the origin and progress of any epidemic or contagious disorder which may have occurred within that time, together with any other matters of interest affecting the mortality or health of their respective districts.

The report from Philadelphia was composed of distinct documents, giving the prevailing diseases, general health, natural formation of the soil, character of the buildings, and other matters affecting the sanitary condition of the city proper, Spring Garden and Penn districts, Southwark, Northern Liberties, West Philadelphia, Richmond, Frankford, Byberry, Germantown, etc. All of these reports contained many interesting and important facts relative to the health of Philadelphia.

A motion was made and adopted that a committee of publication, to consist of three members, should be appointed. The Chair appointed Drs. Isaac Parrish, D. F. Condie, and G. W. Norris.

The sanitary report from Delaware County showed that there is in that county one regular physician for every thousand inhabitants, and for every six and a fraction square miles of territory.

We append the following abstract of the

Sanitary Report of the County of Philadelphia.

The diseases of the county of Philadelphia, in their origin and progress, and in the type which they assume, vary according to locality and surrounding circumstances. In the compactly built portions of the city, disorders show themselves which are rarely seen in the surrounding suburbs, while the rural districts are visited with diseases which never originate in the heart of the city. On this account it is necessary, in considering the diseases of the whole county, to separate the city from the parts which surround it and to view the prevailing diseases in connection with those local circumstances which are known to influence them. With this object, the Philadelphia County Medical Society appointed a committee, composed of gentlemen residing in the several districts, through whom the information contained in this report was obtained. The tables of mortality indicate the deaths from various diseases in the city proper and districts, the boroughs and townships not being included. These tables were carefully prepared at the office of the Board of Health, at the instance of Dr. Wilson Jewell, a member of the committee, and formerly one of that Board. They may be relied on as accurate, so far as the returns made to the Health Office are full and reliable.

The city proper enjoys an excellent reputation for health. It is entirely clear of malarial diseases, and of late years has been generally exempt from any yellow fever or other malignant epidemic fevers. The cholera of 1832 and 1849 was much less extensive and mortal than in New York and some of the cities of the South and West. Epidemic typhus has not of late years appeared, and the cases of this disease in newly arrived emigrants, or amongst the lowest class of population, which occur more or less every year, rarely spread to any extent.

Infantile diseases, believed to be traceable to our peculiar climate and to confined air in hot weather, are unhappily prevalent during the heat of summer, and sometimes to an alarming extent. This arises in part from the oppressive heat of the city not being relieved by a sea breeze, and from the system of building up confined courts and blind alleys, in which are crowded a large number of families, who are unable to avail themselves of the advantages of country air, when their children are attacked by these destructive complaints.

Philadelphia, in common with many other cities and districts of the United States, has, within the past year, suffered with epidemics of scarlet fever, varioloid, small pox, erysipelas, puerperal fever, and other less grave complaints, which observe certain periodical cycles, the peculiar laws of which are not clearly understood. Our business is with the year 1850, just passed, and we will endeavor briefly to note the diseases which have prevailed during that period.

In addition to the ordinary diseases of the winter months, such as catarrh, pneumonia, pleurisy, &c., the city was visited by an epidemic of scarlet fever, which prevailed, to a considerable extent, from the commencement of the year until the approach of warm weather, when it subsided, and then reappeared in the autumn, continuing through the winter, with various alternations of mildness and severity. In some families this complaint appeared to manifest peculiar malignity, carrying off several children in rapid succession, and in those who escaped with life, leaving behind it marks of its ravages, in protracted and painful secondary symptoms, which sometimes inflicted permanent injury upon the system. The causes of this variety in the intensity of the disease in individuals exposed to the same poison, is quite inexplicable, though the fact is well known.

In several instances under the care of the writer of the report, the disease oc-

curred in adults, and in two of these deaths took place. One of these was a man about 50 years of age, who had not, as far as could be ascertained, been exposed to the disease, and who died on the third day, without communicating the disease to any member of his family, which was composed of several unprotected persons who waited on him during his sickness.

Varicella was prevalent in the early months of the year 1850, and in one instance under the observation of the writer, the eruption of scarlet fever and the vesicles of varicella existed at the same time in the same patient.

Measles also prevailed as an epidemic in the latter part of the winter, and during the spring, declining towards summer. The cases were generally manageable, although a considerable mortality from this disease is reported.

Pertussis was quite prevalent during the spring and summer, and many cases continued on through autumn. The disease was sometimes severe, and when complicated with dentition or pneumonia, was often fatal. It appears from the mortuary tables of the Board of Health that 24 deaths occurred from this disease in the eighth month, (August) and only one death in the first, month(January.) This fact would seem to militate against the opinion that whooping cough is commonly fatal from the complication of inflammatory affections of the lungs; while it favors the idea that death in this disease more frequently happens from nervous exhaustion, as the latter is powerfully promoted by intense heat. An important practical suggestion may be derived from this fact, viz. that an early use of tonics, particularly of bark, with nutritious diet and free exercise in the open air, is very important to counteract the tendency to exhaustion: while depletion and nauseating medicines to relieve fancied inflammation should be carefully avoided.

In the early part of the year a few cases of erysipelas were observed, though generally of a mild, non-malignant type, and although affecting the face and scalp, rarely producing death. The same disease appeared again in the autumn, and continued during the winter.

Typhus Fever.—Dr. Lawrence Turnbull writes to the Committee that in February, 1850, this disease appeared as an epidemic in the southern sections of the city. Though severe, none of the cases were fatal. Medicines appeared to exert but little influence over the course and duration of the disease. A sustaining treatment proved more ameliorating than a depleting one.

During the summer months of 1850, the usual forms of bowel disorders, viz: cholera morbus, cholera infantum, and dysentery, made their appearance. Of this last named disease there was an unusual prevalence within the city limits, though it was not sufficiently marked to be considered as an epidemic. Until within the past eight or ten years, dysentery, at least in its severe forms, was comparatively a rare disease in the closely built portions of Philadelphia; and where severe cases did occur, they could usually be traced to the country, thus confirming the opinion expressed by many writers, that this disease owes its origin to exhalations from stagnant pools, and from wet and marshy grounds, and is traceable to the same causes which produce intermittent, and remittent fevers. Certain it is that the epidemic dysentery, which prevails at certain seasons as a fatal and destructive disease in rural districts, was rarely seen within the limits of the city proper until within a few years past, and even now it may be questionable how far the cases which prove dangerous or fatal within these limits, partake of the character of the epidemic form. 413 deaths from dysentery are reported by the Board of Health within the year, although we have no means of determining how many of these were in the city proper, and how many in the suburban districts, which are known to be more or less subject to malarial influences. The larger number of these deaths were in young subjects, and it is probable many of these occurred in children during the period of dentition, and might have been classed by some practitioners under the head of cholera infantum. But making allowance for these abatements, the number of fatal cases of this disorder is unusually large. From the years 1836 to 1847, inclusive, the greatest mortality from dysentery in the city and districts in any one year was in 1847, being 160; and the smallest in 1844, being 47. In 1848 the mortality ran up to 304. The tables for 1849 are not accessible, but in 1850, we find

it at 413, the highest rate for 14 years, making all due allowances for the increase of population. The causes of this increased prevalence of dysentery within the city limits are worthy of investigation, whether they be of local influence or form one of those periodical cycles which are known to govern many diseases.

Cholera infantum prevailed to the usual extent in 1850, and with results varying but little from former years. The mortality in 1847 was 442, and in 1848 it was 457, being but 46 less than in 1850.

During the latter part of summer, and until the occurrence of frost, intermittent and remittent fevers prevail, more or less, in the suburban districts, and a few cases find their way into the city proper. In the year 1850, so far as our observation enables us to speak, the cases were fewer than usual, both in the city and in the surrounding country.

A considerable number of cases of typhoid fever occurred during the same period, some of which originated in malarial districts, and seemed in the early symptoms, more allied to ordinary remittent than to the peculiar enteric fever described by modern writers under the term typhoid. The total number of deaths from typhoid fever in 1850, reported to the Board of Health, is 107; the highest number, 27, occurring in the 10th month, (October.) How many of these cases originated in the city proper it is impossible to say; while in the present state of opinion on this subject it is very difficult to arrive at accurate results in regard to its progress. What is denominated by some practitioners typhus, is called by others typhoid, while remittent or even intermittent fevers of a protracted and low type may be classed as typhoid by some observers. Personal observations have convinced us that the peculiar form of fever described by Louis, Bartlett, and others, as typhoid, and by Dr. Wood as enteric, has existed within the city limits during the year; and the testimony of medical friends well qualified to judge, is equally clear upon this point.

During the latter months of the year 1850, we had a repetition of the diseases of the previous winter, viz.: scarlet fever, measles, whooping cough, erysipelas, &c. There was also an extraordinary prevalence of abscesses in the form of boils, occurring in persons not subject to such complaints, with many cases of anthrax, and of paronychia. At a meeting of the County Medical Society, there was such a remarkable concurrence of sentiment amongst the physicians present as to the frequency of these cases in their practice, as to induce the belief that some peculiar state of the atmosphere or epidemic influence was operating to produce it. It was remarked that the cases of paronychia were most numerous amongst house maids and laboring people, and some of them were observed to be very tedious in healing, even after free opening made in the early stage of the inflammation. The tendency to this form of the disease continues to the present time, though in a less marked degree.

Table of Deaths in Philadelphia in 1850 *from epidemic, endemic and contagious diseases.*

	Males.	Females.	Boys.	Girls.	Totals.
Cholera Infantum,	274	229	214	229	503
" Morbus,	16	8	3	3	24
Diarrhœa,	104	104	77	69	208
Dysentery,	241	172	134	88	413
Erysipelas,	25	29	11	22	54
Fever, Intermittent,	12	4	8	2	16
" Remittent,	24	26	7	14	50
" Typhus,	46	29	5	9	75
" Typhoid,	70	37	20	14	107
" Scarlet,	232	207	262	197	439
Measles,	40	30	40	30	70
Small Pox,	26	14	19	12	40
Whooping Cough,	62	52	62	52	114
Totals.	1172	941	892	741	2113

The monthly mortality, in 1850, was as follows: January 603, February 579,

March 580, April 596, May 792, June 708, July 1041, August 1150, September 647, October 701, November 515, December 558; aggregate 8510. The mortality in the first year of life is nearly 50 per cent. of the whole number of deaths under 20 years of age, and those deaths which occurred within the 5th year, constitute over five-sixths of those under 20 years of age. The proportional infantile mortality, according to months, stands thus: August 807, July 707, June 491, May 470, September 382, April 378, October 365, March 361, February 355, January 347, December 305, November 300.

The Report from the CITY of Philadelphia is by Dr. Isaac Parrish.

Of the Reports from the various Districts of the County, we make the following abstracts:

NORTHERN LIBERTIES.—This report is from Dr. Thomas H. Yardley. "The Schuylkill water is furnished here to 5300 houses, 720 of which are provided with baths: in addition to which there is a select bathing establishment for respectable females, furnished with hot, cold and shower baths. It is managed by a committee of ladies, who are furnished with the funds to carry it on by voluntary contributions, and who, on being satisfied of the respectability of the applicant, gives her a ticket, which is not transferable, but admits her during the bathing season. It has been in operation two years; and during the first year 1000 baths were taken. It is highly appreciated, and has been of invaluable service to the health and comfort of the class of individuals for whom it was established."

The gas manufactory in the district of the Northern Liberties has greatly improved the health of the neighborhood in which it is situated, which was the lowest and most unhealthy part of the District. The residents there have previously been usually subject to dysentery and autumnal fevers, and during the cholera season of 1833, previous to the erection of the gas works, the disease was more prevalent and fatal here than in any other part of the district. During the last epidemic not a case of cholera occurred in the neighborhood, and dysentery and autumnal fevers have entirely disappeared. The superintendent further states that several persons affected with symptoms of a pulmonary complaint have been employed at the gas works, and have become perfectly well and hearty men.

RICHMOND.—This district is exposed to malarial poison from an extensive marsh upon its southern and western border, through which flows Gunner's Run, and from the Delaware on the east. Dr. Edgar Janvier, of Richmond, says:—'We are scarcely ever without cases of intermittent and remittent fever, though fewer cases have occurred within the last twelve months than previously. During the autumn of 1850 they prevailed to a considerable extent on our river road as far as Bridesburg, but this spring, throughout our neighborhood, there is an exemption.' Dr. J. reports a few epidemic cases of typhoid fever in Richmond during the year 1850. Pertussis, rubeola, scarlatina, and varicella have prevailed epidemically at different periods during the year, but have manifested nothing unusual in their type. The scarlet fever epidemic Dr. Janvier believes to have been peculiarly severe and fatal in this district. He saw some cases die within 24 or 48 hours of the attack. The disease did not appear to be influenced as much by intercourse as by the epidemic constitution of the atmosphere. Many families enjoyed entire exemption, while severe and fatal cases occurred in the same block.

Physicians practising in Richmond district state that the coal laborers are unusually healthy, notwithstanding the large quantity of fine coal dust swallowed and inhaled by them, and which forms a complete coating to the skin. The appetite of the laborers is excellent, and delicate persons are said often to become strong and vigorous while working among the coal. So completely does the fine dust penetrate the tissues, that not only the expectoration is loaded with it, but the discharges also; and yet dyspepsia and pulmonary consumption are rare among the laborers. There would seem, indeed, to be a decidedly healthful influence exerted by the coal dust upon those who are constantly exposed to it; a fact which may suggest an important hint to practising physicians.

KENSINGTON.—Dr. Helffenstein writes to the committee that measles and scarlet fever have prevailed as epidemics in 1850; most of the cases of the latter disease were of a mild character, the most severe and fatal occurring in the latter part of the year. Intermittent and remittent fevers are common in this district, though they were less prevalent in 1850 than in some former years. Abscesses, felons, and carbuncles have prevailed in Kensington to an unusual extent, and amongst all classes of people.

WEST PHILADELPHIA.—This section of the county appears, from the report of Dr. Gallagher, of Mantua, to have suffered less from epidemic disorders than many other portions. Dr. G. remarks: "I have seen very few cases of scarlatina, altogether mild in its form, and yielding very readily to ordinary treatment." Malarial fevers prevail in this district, especially along the banks of the Schuylkill to a greater or less extent every year. In the year 1850 these diseases were not so prevalent as usual. Typhoid fever, according to Dr. Gallagher, has prevailed more or less in this district for the past sixteen years; the cases usually occur in the autumn, and Dr. Gallagher has observed that the later in the season the more severe and fatal is the disease. There appears to have been less sickness, and that of a milder form, in this district, in 1850, than for years past.

SPRING GARDEN AND PENN DISTRICT.—The report from this part of the city, which is from Dr. Wilson Jewell, is somewhat lengthy and well considered. "As an evidence of the comparative immunity of these districts from diseases epidemic in their character, we have only to advert to the statistics of the cholera in 1849, as published by the Board of Health, where it is stated that while in Southwark, Moyamensing, and Richmond, the ratio of cases of cholera to population was as one to every 136 inhabitants, Penn and Spring Garden presented but one in every 514 inhabitants. Spring Garden and Penn suffered from scarlet fever in the commencement of 1850, but to a less degree than some other sections of the county. In the northwestern extremities of Spring Garden and Penn districts, as well as in some other unimproved portions of the districts, malarious fevers of an intermittent and remittent type prevail endemically during the summer and autumn months, caused by miasmatic exhalations arising from decomposing animal and vegetable substances exposed to the rays of the sun, and which are at all times fruitful cases of disease and active agents in the propagation of fevers. The ponds of stagnant water on unimproved lots and in the vicinity of brickyards are also cited as among the causes, beside the frequent turning up of the soil at brickyards, the levelling of lots, filling up and digging down new streets, digging of cellars and filling up of lots which lay below the level of streets."

SOUTHWARK.—"The only low and wet part of the district is small in extent, situated on the bank of the river Delaware to the south and east. It formed originally the commencement of the alluvial meadows, which extend along the whole of the western shore of the river to the mouth of the Schuylkill. The banks to the southern line of the district are now in ruins, and the meadow land is constantly overflowed. The principal streets of the built portion of the district are well paved and drained. Most of the drainage is on the surface, the extent of culverts within the district being very limited. The streets are kept perfectly clean, and there is no accumulations of filth in any part of the built portion of the district. The houses are mostly of modern construction, and though frequently small in size, are tolerably well ventilated. All are plentifully supplied with the Schuylkill water. We allude now to the houses fronting on the main streets. Unfortunately, the cupidity of capitalists has induced them to construct numerous courts and alleys. In some of those sufficient ventilation is not provided for, and the houses are crowded with a miserable, improvident population, by whom little attention is paid to cleanliness and domestic comfort. In general, however, the population of Southwark is composed of industrious, thrifty mechanics, and their families. Having the means to command the comforts of life, they feel a pride in the neatness and cleanliness of their houses and persons. The pauper and abandoned population of the district is comparatively small. It is sufficiently extensive, however, to crowd the small houses in the narrow courts and alleys, and to occasion no small amount of disease and suffering, es-

pectially during the winter seasons." The report from which the above is extracted, which is by Dr. D. Francis Condie, remarks that during the past year no serious epidemic has prevailed. Towards the close of the summer and the principal part of the autumn, remittent fevers prevailed to a very considerable extent south of the compactly built portion of the district, and along the whole of its river front. It was protracted in duration, though not particularly severe, and seldom fatal.

Friday, 31*st May*.—Dr. Samuel Jackson, late of Northumberland, offered the following resolution, which was adopted after an interesting discussion:

Resolved, That this Society approves the recommendation of the Philadelphia County Medical Society in favor of a change in the mode of representation of the National Medical Association, making such representation to consist exclusively of delegates from State and County Medical Societies.

Much of the session was occupied in the reading of reports of the medical topography of Berks, Chester, Blair, Montgomery, Delaware, and Huntingdon counties. The report from Berks was voluminous, and excited general remark from its completeness.

These reports contained accounts of the epidemic diseases of the several counties from which they came, with interesting sketches of their medical topography, prepared by Committees of these Societies. It appears from these reports, that a severe epidemic dysentery had prevailed within the past year in Chester county, an excellent account of which is reported by Dr. Garton, of that county. Intermittent and remittent fevers had prevailed in various marshy districts, while on high and dry lands no such diseases had appeared.

Scarlet fever appears to have prevailed in all the counties from which reports were received.

From Montgomery county, a report prepared by Dr. Corson, gives an account of a terrific epidemic erysipelas, which appeared in the high lands about two miles east of Norristown in the fall of 1847. At the same time a puerperal fever occurred amongst the women of this district.

Dr. West, from a Committee appointed at the last annual session to consider the subject of establishing a pathological museum in connection with the State Society, reported that the project, although desirable, would require a large fund to effect it, which the Society does not possess. They report however, that the Philadelphia College of Physicians is engaged in an effort of the same kind, and they therefore recommend that any member of the State or County Societies having pathological specimens, which they are willing to contribute towards the formation of such a museum, be requested to forward them to the College of Physicians who will take charge of them as a nucleus until the State Society is ready to make its own effort, and throw open the collection to the State Society for inspection. The report was adopted.

The question of the next annual session was then discussed. The general sentiment seemed to be in favor of Philadelphia as the place of meeting, and it was accordingly fixed upon. The time agreed upon was the last Wednesday in May.

The committee on nominations reported the following list of nominations for officers of the Society for the ensuing year.

President.—Dr. Charles Innes, of Northampton.

Vice Presidents.—Dr. Joseph B. Ard, of Mifflin; John Baskin of Mercer; George W. Norris, of Philadelphia; John P. Heister, of Reading.

Recording Secretaries.—Drs. Isaac Remington, of Philadelphia, and C. D. Gloninger, of Lebanon.

Corresponding Secretary.—Dr. Isaac Hays, of Philadelphia.

Censors.—1st and 2d Districts—Dr. Geo. B. Wood, of Philadelphia; Geo. B. Kerfoot, of Lancaster; Isaac Thomas, of Chester county; Jesse Young, of Delaware; John W. Gloninger, of Lebanon. 3d and 4th Districts—Drs. John D. Ross, of Blair; J. H. Case, of Perry; W. McIlvaine, of York; Joseph Henderson, of Mifflin, Joseph B. Ard, of Mifflin. 5th and 6th Districts—Drs. J. P. Gazzam, of Allegheny; John Baskin, of Mercer; C. Perkins, of Erie; W. Addison, of Allegheny; G. D. Bruce, of Allegheny.

Delegates to the National Medical Convention for 1852.—Drs. Isaac R. Walker, of Chester; Traill Green, of Northampton; George W. Norris, of Philadelphia; Elwood Harvey, of Delaware; F. S. Burrows, of Lancaster; John L. Foulke, of Montgomery; J. P. Heister, of Berks.

Dr. Ard declined the nomination as one of the censors of the 3rd and 4th districts, as he had removed from Mifflin county to Philadelphia; and, on his motion, Dr. G. B. Mitchell was substituted in his place; the report was then adopted, and the persons nominated elected to their several offices.

An interesting report was received from Professor Jackson, on the subject of small-pox. This report was from a committee appointed at a previous annual session, and a report was made at the session of 1850 on the subject, the committee being continued from year to year. The investigations of the committee develop some very important facts.

Dr. Emerson offered the following resolution which was adopted:

Resolved, That a Special Committee of the Medical Society of the State of Pennsylvania, be appointed to investigate the accuracy of the conclusions put forth by Drs. Gregory, of London, and Cazenave of Paris, in relation to Small-pox and Vaccination, as referred to in the report made to this Society by the Committee on Small-pox and Vaccination.

The Chair appointed Dr. Emerson, Prof. Jackson, Drs. Warrington, Parrish, and John D. Griscom.

On motion of Dr. Emerson, a committee of three was appointed to memorialize the Legislature in favor of the gratuitous revaccination of the poor throughout the State. Drs. Emerson, Condie, and Jewell, were appointed the committee. On motion of Dr. Condie, the co-operation of the county societies and the profession generally throughout the State, was requested.

The thanks of the Society were tendered to Dr. Worthington for his

able and efficient services as President, to which he briefly replied, and yielded the chair to his successor, Dr. Innes. The latter gentleman delivered a few words of introductory address, which were well received.

The Society then adjourned to meet on the third Wednesday of May, 1852, in this city.—*N. Amer. and U. S. Gaz.*

AMERICAN MEDICAL ASSOCIATION.

Fourth Annual Meeting, held in Charleston, May 6th, 1851.

The Association met at 11 o'clock, at St. Andrew's Hall, Broad street, the President, Dr. Mussey, in the Chair, and Dr. H. W. Desaussure, Secretary.

The Association having been organized, Dr. Thomas Y. Simons, the Chairman of the Committee of the South Carolina Medical Association, in a warm and hearty address, welcomed the Delegates present from the other States, to the City and State, on behalf of his associates, which was responded to in a becoming manner by the President.

Dr. Frost, on behalf of the Committee of Arrangements, read the list of Delegates present—198 present and 27 States represented.

The President of the Association read a letter from Dr. Stillé, resigning his office, in consequence of the impaired state of his health.

On motion of Dr. Arnold, of Savannah, Ga., it was proposed that the letter of Dr. Stillé be placed on record, in compliment to him, for the interest he has manifested in the Association.

Dr. Arnold offered the following resolution, which was adopted:

Resolved, That a Committee of one from each State represented in the Association, to be chosen by their respective Delegates, be appointed to nominate suitable officers to be elected for the ensuing year.

On motion of Dr. Frost, the Association took a recess of ten minutes to enable the Delegation to appoint one of their number a member to constitute the Nominating Committee, in compliance with the above resolution.

The President of the Association, at this stage of the proceedings, read an address of some length on matters connected with the profession, and the advancement of medical science, which was well received, and elicited the commendation of those present.

On the reassembling of the Convention, the President reported the following gentlemen, as having been selected as a Committee on Nominations from the different State Delegates, viz.: Dr. Geo. Mendenhall, of Ohio; B. R. Wellford, of Virginia; Jos. Fithian, of New Jersey; R. D. Arnold, of Georgia; G. W. Miltenberger, of Maryland; H. R. Frost, of South Carolina; N. G. Pittman, of North Carolina; W. H. Anderson, of Alabama; A. H. Stevens, of New York; Usher Parsons, of Rhode Island; Joseph Carson, of Pennsylvania; Z. Adams, of Massachusetts; Thos. Reyburn, of Missouri; Jas. Jones, of Louisiana; J.B. Flint, of Kentucky; John Sloan, of Indiana; C. Boyle, of the District of Columbia, and J. B. Lindsley, of Tennessee.

The Nominating Committee, through their Chairman, then read the subjoined names as suitable candidates for officers of the Association for the ensuing year, viz.:

Dr. JAMES MOULTRIE, of S. C., President.
Dr. GEO. HEYWARD, of Mass.,
Dr. R. D. ARNOLD, of Geo.,
Dr. B. R. WELLFORD, of Va.,
Dr. J. B. FLINT, of Kentucky, } V. Presidents.
Dr. H. W. DESAUSSURE, of S. C.,
Dr. P. C. GOOCH, } Secretaries.
Dr. ISAAC HAYS, Treasurer.

On motion of Dr. La Roche, of Pa., the Report was accepted, and the gentlemen thus nominated were elected the officers of the Association for the ensuing year, and were invited to take their seats.

The President elect then took the chair, and in a few appropriate remarks, returned his thanks for the honor thus conferred on him by the Association.

The Secretary read a report transmitted to him from the Committee of Unfinished Business, appointed at the session of 1850.

On motion of Dr. Arnold, of Georgia, the Report was accepted, and laid on the table.

On motion of Dr. Gaillard, of South Carolina, the following resolution, offered by Dr. Drake, of Cincinnati, at the session of 1850, was taken up for consideration.

Resolved, That the second section of the Regulations of the Association, be so amended as to require that candidates for membership by invitation, be nominated in writing by five members; that when elected they shall enjoy all the rights of Delegates, and that all permanent members shall be entitled to vote.

After some discussion, on motion of Dr. A. H. Stevens, of New York, the Resolution was referred to a Committee, consisting of Drs. Drake, of Ohio, Wood, of Pa., and Wellford, of Va.

Dr. Stevens, of New York, offered the following Resolution, which was discussed by Drs. Storer of Mass. and Moore, of Ga. and finally rejected.

Resolved, That a Committee be appointed to report to the Association the business before it, and to offer such suggestions as they may deem advisable for the due discharge of the same.

On motion, the Association adjourned to meet on Wednesday at 10 o'clock.

Second day—Morning Session.

The Convention met pursuant to adjournment, the President in the Chair.

The minutes of the previous meeting were read and confirmed.

Dr. Wood asked and obtained leave to read the following report, on amending the Constitution, on behalf of himself and Dr. B. R. Wellford:

The Committee to whom was referred the Proposition of Dr. Drake,

for an alteration of the rules in relation to the admission and rights of members, have the honor to report as follows:

There are two distinct branches of the proposition; the first of which relates to the invitation of medical men, not delegates, to participate in the proceedings of the Association; the second has in view the extension of the right of voting to permanent members.

The Committee agree in the general purport of the first part of the proposition. As it now stands, the rule admits of a too easy admission to the privileges of members, and it is susceptible of great abuse. It might happen, in a place where the number of resident Physicians was very considerable, that sufficient might be introduced to control the decisions of the delegates. To guard against such a result, the Committee recommend, that, in addition to the provision that none should be invited by the Association, unless upon a previous written proposal, by five delegates, the existing rule should be so altered as not to confer upon the invited members the privilege of voting.

In relation to the second part of the proposition, that, namely, which gives the privilege of voting to permanent members, the Committee do not consider its adoption advisable, on the following grounds: This Association is essentially a representative body. Its opinions are supposed to be those of the Societies or Associations by which the delegates are appointed, and go forth to the world with the authority in some degree of the medical profession generally. Now, if permanent members were permitted to vote, they would express their own individual opinions, and support their own individual preferences; both of which might be in direct opposition to those of the delegates, and not fairly representative of general medical sentiment. It is easy to conceive, that combinations among permanent members might be formed, more powerful than the properly delegated body, which might thus be overruled in its decisions. The opinions or wishes of a comparatively few individuals might thus go forth to the world, as those of the profession at large; and private purposes might be answered at the expense of the general good. This would defeat the main objects of the Association, and prevent it from continuing, what it may now be considered to be, the exponent of enlightened medical sentiment in this country.

The Committee, therefore, recommend that the question on Dr. Drake's proposition be taken separately upon its two branches; that the first be adopted with a modification, withholding the right of voting from invited members; and that the second, which confers this right upon permanent members, be not adopted.

GEO. B. WOOD,
B. R. WELLFORD.

Charleston, (S. C.,) May 7, 1851.

Dr. Drake then read the subjoined minority report:

The undersigned, a minority of the Committee, to whom was referred the resolution for amending the second section of the Constitution, begs leave to report, that in his opinion, it is expedient and will be found promotive of the great objects for which the Association was formed, that "members by invitation" should not be admitted, except under a

written nomination, by five members; that when thus chosen, they should enjoy all the rights and privileges of Delegates, including permanent membership; and that all permanent members should be entitled to vote. With these views the undersigned respectfully submits a revision of the resolution into the following:

Resolved, That members by invitation shall be nominated, in writing, by five members, which nomination shall bo made a matter of record; that when elected they shall enjoy the rights and privileges of Delegates, and remain as permanent members of the Association.

Resolved, That all permanent members shall have the right of voting.

Respectfully submitted. DAN. DRAKE.

Dr. I. Hays moved to take up the majority report, which motion was carried.

Dr. Arnold spoke against the article of the Constitution, authorizing invited members to vote.

Dr. Wood explained his report, and urged its adoption.

Dr. Davis, of Chicago, said that there was much misunderstanding in regard to the intention of the Constitution in respect to the members by invitation. He hoped that the Constitution would be strictly acted up to, and that members should be invited only "from sections not otherwise represented."

Dr. Wood said his was an amendment, and not a repeal of the old provision.

Dr. Drake responded—He had waited for arguments against his resolution, but had heard none. He then entered into a long argument in favor of *popularizing* the Association with the Profession in the United States, and took ground in favor of a permanent place of meeting at Washington City.

Dr. W. Atlee, of Lancaster, said he could see no harm in giving the privilege of voting to invited members who came from unrepresented localities, but was opposed to the right of voting proposed to be given to permanent members.

Dr. Meigs, of Philadelphia, asked whether a gentleman would be invited to attend without any privileges, and went on to say that he hoped the Convention would have five, ten or even twenty thousand in attendance at some future period.

Dr. Hooker, of Connecticut, begged to be allowed to offer the following Resolution, the Resolution of Dr. Drake having been laid on the table for the present.

Resolved, That no member be permitted to speak longer than 10 minutes at one time in any one debate.

Dr. Phelps, of New York, offered to amend the Resolution by inserting "15," which motion was lost.

The Resolution as offered by Dr. Hooker was then adopted.

Dr. Hays moved to lay the subject on the table, and added that by a constitutional provision it was required to lay over one year.

The motion was seconded by Dr. Tucker, of Virginia.

Dr. Dickson, of South Carolina, asked if the motion swept off the whole Resolution, and was answered affirmatively by Dr. Hays.

Dr. ——— said if the matter was postponed now, they would not be out of difficulty, because all that is necessary to defeat it next year would be to move to amend it, and it would have to lay over a year again, &c.

The matter was finally laid on the table.

Dr. Wood, of Pennsylvania, called up the second part, or that portion giving to permanent members the right to vote.

The majority committee accepted the substitute of the minority committee, which was read as follows, viz.:

Resolved, That all permanent members shall have the right of voting.

Dr. Dickson urged the adoption of the above Resolution.

Dr. Hays, of Philadelphia, remarked that the Constitution had not been studied by the gentleman who had urged the adoption of the Resolution; and spoke in opposition to the measure.

Dr. Thomson, of Delaware, supported Dr. Hays, and hoped that the whole matter would be laid over for a year.

Dr. Dickson observed that he had been accused of ignorance of the Constitution. He hoped to have these gentlemen always here to instruct him.

Dr. Bond, of Maryland, took part in the discussion.

Dr. Adams, of Massachusetts, remarked that they ought to strike out the words—"Permanent Delegates"—from the Constitution, and was proceeding with his remarks, when the gentleman was called to order.

The question was here taken on the adoption of the Resolution, which was lost by a large majority.

Dr. I. Hays, the Treasurer of the Association, then read the Report of the Committee of Publication, and also the Report of the Treasurer.

The subjoined resolutions, appended, were read and adopted.

1. *Resolved*, That the assessment for the present year shall be three dollars.

2. *Resolved*, That those Delegates who pay the assessments, shall be entitled to one copy of the transactions for the present year; and that the payment of two dollars, in addition, shall entitle them to two additional copies.

3. *Resolved*, That permanent members shall be entitled to one copy of the transactions for the present year on the payment of two dollars, and three copies on the payment of five dollars.

4. *Resolved*, That Societies which have been represented in the Association shall be entitled to copies for their members on the same terms that copies are furnished to permanent members.

5. *Resolved*, That permanent members, unless present at the meeting as Delegates, shall not be subject to any assessment.

6. *Resolved*, That any Delegate who is in arrears for his annual assessment shall not be considered as a permanent member.

7. *Resolved*, That the several Committees be requested to bring to the meeting of the Association, their reports, correctly and legibly transcribed; and that they be required to hand them to the Secretaries as soon as they have been read.

All which is respectfully submitted. ISAAC HAYS,
Philadelphia, April 20, 1851. D. FRANCIS CONDIE.

Dr. Drake, of Ohio, moved that the Report on Surgery be read first. Adopted.

Professor Eve, Chairman of Committee on Surgery, then proceeded to read his report.

A motion was made by Dr. Davis to commit the same to the Committee on Publication, which was adopted.

Dr. Hays moved to read Dr. Flint's Report by its title—Practical Medicine—and refer the same to the Committee on Publication, which motion was adopted, and several hundred copies printed and furnished by the author were directed to be distributed.

A motion was then made to adjourn till 5 o'clock, P. M., which was adopted, and the Convention adjourned.

Afternoon Session.

The President having organized the meeting,

Dr. Boyle, of Washington, offered a resolution that the Association in future meet at Washington City.

Dr. C. P. Johnson, of the Virginia Medical Society, extended an invitation to meet at Richmond; Dr. Jones, of the University of Louisiana, to meet in New Orleans; Dr. J. P. Johnson, of Missouri, to meet in St. Louis. The resolution and invitations were referred to the Committee on Nominations.

The President suggested to the Society the propriety of appointing the Standing Committees at an early date.

Dr. Wood remarked that there was a proposition to abolish Standing Committees.

Dr. Hays said he was opposed to these Committees, but would not press an alteration.

Dr. Tucker moved that the appointment of the Standing Committees be referred to the Committee on Nominations, which motion was adopted.

Dr. Jones, of Louisiana, resigned as a member of the Committee of Nominations; and Dr. Fenner, of New Orleans, was appointed in his place.

Dr. Parsons then moved that the Committee on Nominations be requested to resume its labors, which was adopted.

Dr. Wragg, of Charleston, moved that the Report of the Committee on Prize Essays be read, and then that the Obstetric Report be brought up.

The Report on Prize Essays was then read, and certain resolutions appended thereto were adopted.

When, on motion of Dr. Ready, of South Carolina, the whole matter was referred to the Committee of Publication.

Dr. Storer, of Boston, Chairman of the Committee on Obstetrics, read the Report on that subject. He stated that he had received a letter from Dr. Thompson, of Illinois—that he was the only member of the Committee who had aided him in any degree. He mentioned this fact, because he had to hold himself entirely responsible for all the inaccuracies, &c.

Dr. Phelps, of New York, moved that the Report be referred to the Committee of Publication.

Dr. Robertson, of South Carolina, moved that the statistics, alluded to in the Report, be stricken out, as the author of them was not a reliable man.

Dr. Storer seconded the motion.

Dr. Bond moved to postpone the Report until morning, which was seconded by Dr. Gilman.

A short debate here ensued; when it was finally agreed to re-commit said portion of the Report, to be corrected and laid before the Association in the morning.

On motion, the Convention adjourned.

Third day, Morning Session.

The President, Dr. James Moultrie in the Chair.

The Minutes of the previous meeting were read, and after some slight amendments were confirmed.

Dr. J. M. Smith, of Mass., moved that the Report of the Committee on Medical Education be made the special order, after the disposal of the Report of the Committee on Obstetrics.

Dr. Gaillard, on behalf of the Committee of Arrangements, read a list of Delegates as registered since the last report.

Dr. Campbell, of Georgia, presented a model of a mal-formation of the knee joint, the patella being absent.

Dr. Wood, of Pennsylvania, offered the following resolution:

Resolved, That Colleges, exclusively of Dentistry and Pharmacy, are not recognized by the Association, as among the bodies authorized to send Delegates to its meetings.

Dr. Wood, of New York, moved to amend, by dividing the Resolution, so as to take the question, first, on the reception of Delegates from Colleges of Dentistry; secondly, on the reception of Delegates from Colleges of Pharmacy.

The amendment having been accepted, the question of the reception of Delegates from Colleges of Dentistry was debated.

Dr. Lamb moved an indefinite postponement of the Resolution, which was lost.

Dr. Yardley, of Pennsylvania, asked and obtained leave to read the subjoined Resolution, presented by the Philadelphia County Medical Society.

Resolved, That all the Medical Colleges in the United States are hereby earnestly and respectfully requested to hold a Convention, through Delegates respectively chosen by them at least once in every six years, to take into consideration the proper method of harmoniously elevating the standard of Medical education in the said Colleges.

The discussion of the original question was then resumed.

A motion was finally made by Dr. Hays, of Pennsylvania, that the whole resolution of Dr. Wood, including colleges of Dentistry and Pharmacy, be referred to a special committee of five members, which resolution was adopted.

On motion of Dr. Yardley, of Pennsylvania, the resolution presented

by the Philadelphia County Medical Society was also sent to the same Committee.

Dr. Jones, of North Carolina, offered the following resolution:

Resolved, That all the Medical Colleges in the United States, are hereby earnestly and respectfully requested to hold a Convention, through Delegates respectively chosen by them, at least once in every six years, to take into consideration, the proper method of harmoniously elevating the standing of Medical Education in the said Colleges.

The order of the day was then called up, when Dr. Storer reported that he had erased the statistics referred to yesterday, and that he placed the report in the hands of the Association. Dr. S. said that there was objection to the remarks on the subject of Dr. Gilman's paper on the speculum uteri. He asked that he be permitted to remove the unnecessary expression of opinion in regard to that subject. He further added that he had taken from the journals these facts, &c., and was not therefore responsible for the correctness of the papers, &c.

Dr. Bond, of Md., remarked that there were charges in these reports which he did not individually endorse; but which got out in a book under the sanction of the Association.

On motion of Dr. Davis, the report was referred to the Committee on Publication.

At this stage of the proceedings, Professor S. S. Haldeman, of Lancaster City, Pennsylvania, through Dr. John L. Atlee, presented to the Association an Essay on Latin Pronunciation, of which he is the author; and which, on motion of Dr. Atlee, was referred to the Committee on Medical Literature.

On motion, the regular order was suspended for the reception of the Report of the Committee of Nominations which was read and laid on the table.

Dr. Hays then called up the Resolution on page 43, vol. 2, of the transactions of the Association, and moved to strike out "all that relates to Committees," &c.

The motion was seconded by Dr. Stevens, and urged by Dr. Drake, who read some ten or twelve special points, which he said ought to occupy the Association instead of being occupied with Epitomes of Rankin & Braithwaite.

Dr. Hooker, of Conn., spoke of the looseness of Committees and editors of the Journals.

Dr. Davis thought that they could decide on the matter at once.

Dr. Hays proposed to dispense with the Standing Committees. The question was then taken on the resolution, which was adopted.

Dr. Wood, of Pennsylvania, offered the following resolution, which was adopted:

Resolved, That a Committee be appointed to take into consideration the arrangement of a Committee for future action, to report as speedily as possible.

The Chairman of the Committee on Medical Education was about to read the regular report on that subject, when Dr. Drake moved the suspension of the reading till after the recess, as it was a very long report.

On motion of Dr. Johnston, of Missouri, the report of the Committee on Medical Literature was then taken up.

Dr. Desaussure announced that Dr. Davis would read a paper entitled an experimental enquiry concerning some points connected with the process of Assimilation and Nutrition.

Dr. Reyburn, of Missouri, presented and read the Report of the Committee on Medical Literature. In the Course of his reading the Report, he gave way to a motion to adjourn.

Afternoon Session.

The President took the Chair at half past 5 o'clock and organized the meeting.

The Secretary announced the following gentlemen as having been appointed by the President, under Resolution of this morning, concerning a Committee for the arrangement of business, for the occupation of the Association in future: Drs. G. B. Wood, of Pennsylvania; I. Hays, D. Drake, A. H. Stevens, W. Hooker, B. R. Wellford, and S. H. Dickson.

The following gentlemen were appointed a Committee under a resolution in regard to Schools of Pharmacy and Dental Surgery, viz: Drs. Hays, Stevens, Yardley, Storer and Jones.

Dr. Dickson moved the following Preamble and Resolutions, which were seconded by Dr. Bond, and unanimously adopted without debate.

Whereas, efforts are being made to repeal the law of 1847, which confers protective rank on the members of the Medical Department of the Army, therefore

Resolved, That the American Medical Association, views with regret the existence of hostility to the act of Congress, approved February 11, 1847, which confers legal rights, and equality with other Staff Departments, on the Medical officers of the Army, and gives them a position to which the importance and character of the profession entitles them.

Resolved, That copies of these resolutions, with the resolutions of the Association, passed at its last annual meeting, on the same subject, be transmitted to the Secretaries of War and of the Navy, through the Chiefs of the Medical Department of each service, and to the presiding officers of the Senate and House of Representatives of the United States.

The reading of the Report of the Committee of Medical Literature was then concluded.

On motion, the Report was adopted, and referred to the Committee on Publication.

The Report of the Committee on Medical Education was then called for, and as the hour was late, the Chairman read only so much of it as relates to Demonstrative Midwifery, which had by special resolution been referred to the Committee.

On motion, the Report was accepted, and referred to the Committee of Publication.

Dr. Dickson presented the following Resolution, which was adopted:

Resolved, That this Association unanimously approve of the opinions expressed in the Report of the Committee on Medical Education in respect to Demonstrative Midwifery.

The Convention then adjourned.

Fourth day, Morning Session.

The President, Dr. James Moultrie, in the chair.

The minutes of the last meeting were read and confirmed.

The report of the Committee on Medical Education being the special order, Dr. Stevens, of New York, asked and obtained leave to introduce the following resolutions;

Resolved, That the members of this Association cannot separate without expressing their grateful sense of the hospitalities, and numerous delicate attentions received from their Medical brethren of South Carolina, and the citizens of Charleston.

Resolved, That a Committee be formed to procure a tablet with a suitable inscription, commemorative of this meeting, and the feeling it has elicited; to be placed at the disposal of the Medical Association of South Carolina.

This tablet is here placed by the American Medical Association, to commemorate their annual meeting in the city of Charleston, in May, 1851, and to signalize their gratitude for the extraordinary professional and social enjoyments that accompanied it.

The resolutions having been seconded were adopted; and Dr. Stevens, further moved that Drs. Hayward, of Mass. and F. A. Ramsey, of Tenn. and himself constitute the Committee.

Dr. Ramsey, of Tenn., asked and obtained leave to read a letter from Dr. E. D. Fenner, of Louisiana, and offered the following resolution on the subject, which was adopted.

Resolved, That the efforts of Dr. Fenner, to place on a firm and durable basis, an annual publication, embracing Medical Reports from the whole Southern portion of the Union, merits the commendation of this Association, and should receive solid support from American Physicians.

Dr. Hays, of Pa. asked and obtained leave to call up for consideration, so much of the report of the Nominating Committee, as relates to the selection of the next place of Meeting of the Association, and the appointment of the Committee of Arrangements and the Committee of Publication, the other Standing Committees having been abolished. The report having been read, Dr. Drake, of Ohio, made an urgent appeal in favor of Washington City as the next place of meeting. The question being taken on the adoption of that part of the Report of the Committee, which proposed Richmond, (Va.) as the next place of Meeting, it was adopted by a large majority. The question being taken on the confirmation of the Committee of Arrangements and Publication, the nominations of the Committee were confirmed.

Richmond, Va., was selected as the next place of Meeting by the Association, and the following gentleman appointed a Committee of Arrangements, viz:—Drs. R. W. Haxall, Chairman; Carter P. Johnson, James Beale, Chas. B. Gibson, S. Maupin, R. D. Haskins, C. S. Mills and M. P. Scott. Committee of Publication—Drs. Hays, of Pa., G. Emerson, of Pa., D. F. Condie, of Penn., H. W. Desaussure, of So. Ca., I. Parrish, of Penn., P. C. Gooch, of Va., and G. W. Norris, of Penn.

Dr. Hooker, of Conn., Chairman of the Committee on Medical Educa-

tion, completed the reading of the report of the committee, and offered the following resolutions:

Resolved, That the abuses which exist in the modes of Medical Education pursued in this country, demand the serious consideration of the profession.

Resolved, That free discussion in relation to the causes is an important means of effecting their removal.

Resolved, That in the opinion of this Association no effort to remove these abuses can succeed, that is not based upon a reform in the public sentiment, both of the profession and of the community.

Resolved, That this reform, so far as the profession is concerned, is to be effected mainly through its organization, and that it is therefore incumbent upon every Physician to do all that he can to give them character and efficiency.

Resolved, That this Association have confidence in all proper efforts which have for their object a reform in the sentiments and practice of of the community in relation to Medicine and the Medical Profession.

Resolved, That the recommendations of this Association at its former meetings in regard to Education, both preliminary and medical, be reaffirmed, and that both the schools and private preceptors be still urged so to do their duty as to secure to the community a well educated profession.

Resolved, That in the work of medical reform, while all precipitate movements should be avoided, we should aim at a steady advance, from year to year, till a thorough system of education be established by the profession throughout our country.

Dr. Wood, of Pennsylvania, asked leave to suspend the order usually taken with Reports. Permission being granted, he read the following report, which was adopted:

The Committee to whom was referred the subject of arranging a plan of Committees, for future action, in place of the Standing Committees abolished by the Association, have the honor to report, as follows:

It appears to them that the most feasible plan of accomplishing the objects of the Association, is to select certain subjects, which may be considered as suitable for investigation, and to refer these subjects to special committees, to be appointed before the close of the present session, and to report to the next. Such a selection the Committee have accordingly made, and will offer to the consideration of the Association.

As an additional means of securing valuable contributions, they propose, also, the appointment of a committee, whose business it shall be, in the interval between this and the next session, to receive original volunteer papers, upon any subject which their authors may choose; to decide upon the merits of these papers; and to present to the Association, at its next session, such of them as they may deem worthy of receiving this direction. With a view to increase competition, they think it advisable that a prize of fifty dollars, or a gold medal of that value, be awarded to each of the five papers presented to the Association, or any smaller number of them, which the committee may consider most meritorious, and the Association may resolve to publish.

In reference to the resolution presented in the report of the Standing Committee on Medical Literature, and referred to the present Committee, they have only to observe that, as its ends will probably be most effectively obtained, by the adoption of the general plan which they have already brought before the notice of the Association, they do not consider it expedient to make any further report.

As to the appointment of the Special Committees referred to, your committee think that the most convenient plan will be to refer to a Special Committee, the nomination of a Chairman for each, who shall then select, at his convenience, two individuals, to aid him, with the restriction only, that the persons so selected, shall be members of the Association.

To the same Nominating Committee, may be referred the appointment of the General Committee, whose business will be to receive and judge, whatever papers, may be submitted to them. As the members of this General Committee must frequently compare opinions it will be desirable that they should reside near each other; and it is accordingly proposed, that they should be chosen from one neighborhood. If the plan be found to work well, this locality may be changed every year, so that each section of the Union may, in its turn, be charged with this duty. The committee would suggest that the General Committee should be first chosen from members of the Association residing in Boston or its neighborhood, as the most northern point.

To embody these suggestions in due form, the Committee offer the following resolutions:

I. *Resolved*, That Committees of Three be appointed to investigate and report severally on the following subjects:

1st. Causes of the Tubercular diathesis.

2d. Blending and conversion of the types of fever.

3d. The mutual relations of Yellow Fever and Bilious Remittent Fever.

4th. Epidemic Erysipelas.

5th. Acute and Chronic diseases of the Neck of the Uterus.

6th. Dengue.

7th. The Milk Sickness, so called.

8th. Endemic prevalence of Tetanus.

9th. Diseases of Parasitic origin.

10th. Physiological peculiarities and diseases of negroes.

11th. The action of water on lead pipes and the diseases which proceed from it.

12th. The alkaloids which may be substituted for quinia.

13th. Permanent cure of reducible hernia.

14th. Results of surgical operations for the relief of malignant diseases.

15th. Statistics of operations for removal of stone in the bladder.

16th. Cold water dressings.

17th. The sanitary principles applicable to the construction of dwellings.

18th. The toxicological and medicinal properties of our cryptogamic plants.

19th. Agency of the refrigeration produced through upward radiation of heat as an exciting cause of disease.

20th. Epidemic diseases of New-England and New-York.

21st. Epidemic diseases of Pennsylvania, New Jersey, Delaware and Maryland.

22d. Epidemic diseases of Virginia and North-Carolina.

23d. Epidemic diseases of South-Carolina, Georgia, Florida and Alabama.

24th. Epidemic diseases of Mississippi, Louisiana, Texas and Arkansas.

25th. Epidemic diseases of Tennessee and Kentucky.

26th. Epidemic diseases of Missouri, Illinois, Iowa, and Wisconsin.

27th. Epidemic diseases of Indiana, Ohio and Michigan.

II. *Resolved*, That a Committee of Nomination be appointed, whose duty it shall be to nominate one Chairman for each of the above Committees.

III. *Resolved*, That each of the Chairmen thus nominated shall select, at his earliest convenience, the members of the Association to complete the Committee.

IV. *Resolved*, That a Committee of five members be appointed, to be called the Committee for Volunteer Communications, whose duty it shall be, in the interval between the present and the next succeeding sessions, to receive papers upon any subject from any persons who may choose to send them, to decide upon the merits of these papers, and to select for presentation to the Association, at its next session, such as they may deem worthy of being thus presented.

V. *Resolved*, That the Committee for Volunteer Communications, shall have the power to form such regulations as to the mode in which the papers are to be presented, and as to the observing of secrecy, or otherwise, as they may think proper.

VI. *Resolved*, That the selection of the members of this Committee be referred to the same Nominating Committee, whose duty it will be to appoint the Chairman of the several Special Committees, as above directed; with this restriction, that the individuals composing it shall reside in the same neigborhood.

VII. *Resolved*, That a prize of fifty dollars be awarded to each of the volunteer communications reported on favorably by the Committee, and directed by the Association to be published: Provided, that the number to which the prize is thus awarded do not exceed five; and provided, also, if the number approved and directed to be published exceed five, that in such case, the prize shall be awarded to the five which the Committee may determine to be the most meritorious. All of which is respectfully submitted. GEO. B. WOOD, *Chairman.*

Charleston, May 9th, 1851.

Dr. Hays, of Penn., gave notice, that at the next meeting of the Association, he should offer an amendment to the Constitution, line 4, so as to read $10 instead of $3.

Dr. Atlee, of Pennsylvania, remarked on the value of the Report of

the Committee on Medical Education, and offered the following resolution, which was adopted:

Resolved, That it be recommended to the several State Medical Societies throughout the Union, to procure a re-publication of the Report of the Committee on Medical Education, for general distribution among the profession.

Dr. Drake offered the following resolution:

Resolved, That in the opinion of the Association, the students of our schools should be required to matriculate within the first days after the opening of the Sessions, and continue their attendance to the end of the terms, taking with them evidence of the same, to be presented with tickets of the Professors when they become candidates for Degrees.

The resolution was adopted, and Dr. Gibson moved to defer the filling up of the blank. Some discussion arose on this point, when the resolution was left to read, "within the first days," &c.

The report of the Committee on Medical Science was then called up, when a letter was read from Dr. Dowler, Chairman of said Committee, regretting his inability to be present, and the necessity of sending it.

Dr. Fenner then read the outlines of the report, and asked permission to retain the same for revision, copying, &c. which was granted.

Dr. Mauran offered the following resolution, which was adopted.

Resolved, That the Committee on Publication, be instructed to print conspicuously upon the title page of the forthcoming volume of the transactions, the following declaration, viz: "The American Medical Association, although formally accepting and publishing the Reports of the various Standing Committees, holds itself wholly irresponsible for the opinions, theories or criticisms, therein contained.

Dr. Storer moved the following Resolution, which was adopted:

Resolved, That the hearty thanks of this Association be presented to their late Secretary, Alfred Stillé, M. D. for his constant, unwearied and invaluable services since its first organization.

The report of the Committee on Adulterated Drugs was read. A motion was made to refer the same to the Committee on Publication, which was lost, and a motion to lay it on the table, adopted.

Dr. Gaillard, of South Carolina, Chairman of the Committee on Hygiene, presented an outline of the Report on that subject. Referred to the Committee of Publication, with authority to append thereto a paper now in preparation, on the Mortuary Statistics of certain cities.

Dr. Drake, of Ohio, offered the following amendments to the Constitution, which were read and ordered to lie over under the rule:

All members by invitation, must be nominated in writing by five members of the Association, whose names shall be recorded in the minutes. When elected, they shall enjoy all the rights and privileges of Delegates, and remain permanent members of the Association.

All permanent members shall be entitled to vote, and when they attend a meeting of the Association, their respective names shall be registered, and each shall pay the sum required from a delegate.

The Secretary read a Protest from the Iowa University, against the representation of Rush Medical College in this Association.

Dr. Jervey moved to refer the Protest to a Special Committee, to report at once.

Dr. Wood moved to refer it to the Committee on Colleges of Pharmacy and Dentistry, which was carried. Dr. Jervey withdrawing his motion.

Dr. Wood read the following Report of the Committee of Nominations, which was adopted:

The Committee to whom was referred the nomination of the Chairman of the several Special Committees, to report at the next session, and also, of the committee for volunteer communications, report that they have fulfilled the object of their appointment, and offer the following list of Chairmen, to the committees first referred to, viz:

1st. Dr. F. Condie, Philadelphia, Chairman of the Committee on the causes of the Tubercular Diathesis.

2d. Dr. S. H. Dickson, of Charleston, S. C., on the blending and conversion of the Types of Fever.

3d. Dr. James Jones, of New-Orleans, on the mutual relations of Yellow and Bilious Remittent Fevers.

4th. Dr. John B. Johnson, of St. Louis, Mo., on Epidemic Erysipelas.

5th. Dr. Charles D. Meigs, of Philadelphia, Acute and Chronic diseases of the Neck of the Uterus.

6th. Dr. J. P. Jervey, of Charleston, S. C., on Dengue.

7th. Dr. Daniel Drake, of Cincinnati, Milk Sickness—so called.

8th. Dr. Lopez, of Mobile, Alabama, Epidemic prevalence of Tetanus.

9th. Dr. Geo. B. Wood, of Philadelphia, on diseases of Parasitic Origin.

10th. Dr. R. D. Arnold, of Savannah, Geo., on the Physiological Peculiarities, and diseases of Negroes.

11th. Dr. Horatio Adams, of Waltham, Mass., on the Action of Water on lead pipes, and the diseases which proceed from it.

12th. Dr. Jos. Carson, of Philadelphia, on the Alkaloids which may be substituted for quinia.

13th. Dr. Geo. Hayward, Boston, Massachusetts, on the Permanent Cure of Reducible Hernia.

14th. Dr. S. D. Gross, Louisville, Kentucky, on Results of Surgical Operations for the relief of Malignant Diseases.

15th. Dr. James R. Wood, New-York, Statistics of the Operation for the Removal of Stone in the Bladder.

16th. Dr. Charles A. Pope, St. Louis, Missouri, Water, its topical uses in Surgery.

17th. Dr. Alex. A. Stevens, New-York, Sanitary principles applicable to the Construction of Dwellings.

18th. Dr. Porcher, Charleston, South-Carolina, Toxicological and Medicinal Properties of our Cryptogamic Plants.

19th. Dr. G. Emerson, Philadelphia, Agency of the Refrigeration produced through upward Radiation of Heat, as an exciting cause of disease.

20th. Dr. Worthington Hooker, Connecticut, on the Epidemics of New-England and New-York.

21st. Dr. John L. Atlee, of Lancaster, Penn., on the Epidemics of New Jersey, Pennsylvania, Delaware and Maryland.

22d. Dr. Robert W. Haxall, Richmond, Va., on the Epidemics of Virginia and North Carolina.

23d. Dr. Wm. M. Boling, Montgomery, Ala., on the Epidemics of South Carolina, Georgia, Florida and Alabama.

24th. Dr. Ed. H. Barton, Louisiana, on the Epidemics of Mississippi, Louisiana, Texas and Arkansas.

25th. Dr. Sutton, Georgetown, Ky., on the Epidemics of Tennessee and Kentucky.

26th. Dr. Thos. Reyburn, Missouri, on the Epidemics of Missouri, Illinois, Iowa and Wisconsin.

27th. Dr. Geo. Medenhall, Ohio, on the Epidemics of Ohio, Indiana and Michigan.

The following gentlemen were appointed on the Committee for Volunteer Communications, viz:—Drs. Geo. Hayward, S. B. J. Jackson, D. H. Storer, and Jacob Bigelow, of Boston, and Dr. Usher Parsons, of Providence, R. I.

Signed on behalf of the Committee,

GEO. B. WOOD, *Chairman.*

Charleston, Friday, May 9th. 1851.

The President read an invitation from the Committee of Reception, to a steamboat Excursion.

Dr. M'Intyre of New-York, proposed that the code of Ethics and Constitution of the Association be recommended to published by the several State Societies. Proposition adopted.

Dr. Grimshaw offered the following resolution:

Resolved, That Medical Colleges, in publishing Statements of the number of Medical and Surgical cases treated at their Dispensaries, act contrary to the spirit of the Code of Ethics adopted by this body.

Adjourned.

Afternoon Session.

The Association re-assembled at 5 o'clock, Dr. B. R. Wellford of Virginia, Vice President, in the chair.

The special order was called for, and Dr. Davis, of Ill., read a paper on the influence of certain diet on the functions of Respiration and Calorification, &c.

The President, Dr. James Moultrie, resumed the chair.

Dr. Hays moved to proceed with the consideration of unfinished business.

Dr. Grimshaw offered the subjoined Resolution, which was adopted.

Resolved, That the thanks of the Association be returned to Dr. Davis for the paper just presented by him.

Dr. F. A. Ramsey, of Tenn., called up as unfinished business, the Resolution offered yesterday by Dr. Jones, of Tenn., and not then acted upon, to which Dr. Grimshaw offered the following Amendment—"And that the first Convention be held before the first of May 1852."—The question being taken on the Resolution and the Amendment, they were both negatived by a large majority.

Dr. Phelps, of New York, offered the following Resolutions, which were unanimously adopted:

Resolved, That the warmest thanks of the Association be tendered to the Trustees of the St. Andrew's Society, for the gratuitous use of their very convenient and eligible Hall; and to all those other Institutions and Reading Rooms, which have been so freely thrown open for the inspection and use of the members.

Resolved, That the Committee of Arrangements receive our most grateful acknowledgments for the very handsome and indeed magnificent manner in which they have provided for the entertainment and pleasure of the Delegates from abroad, during their sojourn in the City of Carleston.

Resolved, That not only the Profession of Medicine, but also private munificence, and the kind attentions of the citizens generally, have conspired in manifestation of that urbanity of manner, and that unwearied and kind attention, which commands not only our profound admiration, but will be followed by the most pleasing recollections so long as life and thought shall endure.

On motion of Dr. Stevens, the above resolutions, with those offered by him at the Morning Session, were ordered to be published in the city papers.

Dr. Johnson, of St. Louis, moved to adjourn *sine die*, which was adopted.

The Vice President, Dr. Wellford of Virginia, then congratulated the Association on the happy termination of its labors, and declared it adjourned to meet again in Richmond, Va., on the first Tuesday in May next.

[For a large portion of the above report we are indebted to the courtesy of the Secretary, Dr. Gooch, who will please accept our thanks.—Eds. Exam.]

MEDICAL NEWS.

Dr. Elisha Bartlett has received and accepted the appointment of Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons, of New York, vacated by the death of Dr. John B. Beck.

Dr. Samuel D. Gross has resigned the Professorship of Surgery in the Medical Department of the New York University.

Dr. Alfred C. Post has been appointed Professor of Surgery, and Dr. Meredith Clymer, Professor of the Principles and Practice of Medicine in the Medical Department of the New York University.

A Rich Surgeon.—Ralph Fletcher, Esq., a surgeon of some note in Gloucester, England, died lately, leaving a fortune, acquired in the practice of his profession, of *eighty thousand pounds* (about four hundred thousand dollars.)

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—NO. LXXIX.—JULY, 1851.

ORIGINAL COMMUNICATIONS.

Lectures on Scarlet Fever. By CASPAR MORRIS, M. D., late Lecturer on Practical Medicine in the Philadelphia Medical Institute.

LECTURE VI.

Though it is undoubtedly true, that but few diseases are amenable to the influence of purely specific remedies, it is not the less certain, that general principles of treatment must be regulated in their application to each disease, by close observation of the peculiar character and tendencies which mark its own history. No habit can be more pernicious to the student, and less beneficial to the patient, than that so often adopted by superficial thinkers and indolent practitioners, of omitting the consideration of the causes which produce, and circumstances which influence, the progress of any form of disease; and filling the memory with modes of treatment and specific remedies which may be employed empirically, without endeavoring to understand the principles which should determine their adoption, and regulate their appli-

cation. There is no disease which more fully illustrates this common truth than that now under consideration. It is only from a careful study of its general history, as well as minute observation of the course of symptoms in individual cases, that any suitable idea of treatment can be deduced; and the liability to frequent change in the type of the disease, from simple and sthenic, to irregular and malignant, demanding a corresponding change in the mode of treatment, renders the success of the practitioner equally dependent upon the soundness of his general principles and the accuracy of his particular observation.

Preserving ever certain distinctive peculiarities which prove its identity, yet yielding continually to the influence of those extraneous impressions which govern its development at particular periods, the treatment to be pursued in Scarlet Fever must in like manner be regulated by one leading principle, while it is varied, not only by temporary or local demands, but often in accordance with individual peculiarities. You will find this view of the case has been too little regarded by those writers on the subject whose works are generally consulted by medical students. During some epidemics assuming a sthenic character, in others marked by a strong typhoid tendency; in some, complicated with severe local lesions, while in others, it pursues its course with but little tendency to any particular organ or structure; in some cases, pursuing a course as regular as the progression of the hours; while in others, it only touches at certain points on the confines of the disease, and assumes every conceivable variety of irregularity, it must be at once evident to you that no single remedy or simple plan of treatment could be set forth as appropriate to Scarlet Fever.

There is, however, one idea which should be ever present to your minds, as the regulating principle by which every plan of treatment must be conducted, and which shall place decided limits to the extent to which any course may be followed. Whatever peculiarities may mark the epidemic character, or vary the individual case, scarlet fever in all its varieties, is a disease which has a specific origin, a fixed course, and a certain termination.

There are some diseases in which every hour of continued pain, or disordered function, is a reproach to the skill of the physician;

since they are subject to properly applied remedies, and may, by them, be at once subdued. This, on the contrary, is one, the duration of which is fixed and may not be curtailed; and often its tendencies to local destruction may be only moderated, not wholly averted. This fact should never be lost sight of in this and the other kindred diseases which will claim our attention in succession; since he who should attempt to cut short the duration of scarlet fever, would find that it could be done only at the expense of the life of the subject. Even in guarding against local injuries, the same fact should be borne in mind; as, in a large majority of cases, these have a natural tendency to abatement with the decline of the primary symptoms. It was in all probability the observation of these facts which led Sydenham to express his celebrated caution against over anxiety and too vigorous effort; and by the same knowledge we are supplied with power to meet the empty claim of superior success in treatment, put forth with so much vainglorious boasting by modern empirics. While some cases have a fatal tendency so strong that no skill may avert it, by far the larger proportion of simple and anginose cases need little more than the avoidance of impertinent interference, and the guarding against injurious impressions from without, and they will cure themselves. Let me not be supposed to advocate an indolent indifference, or to assume that no treatment is necessary. There is no disease which demands more watchful care, none is more influenced by skilful scientific practice. I would only remind you that medical science has other remedies than drugs; and caution you against the unscientific resort to empirical perturbative treatment which is certainly more to be dreaded than the morbid impressions of the disease itself. These general principles are applicable to all the various forms assumed by this disease, and must be ever kept present in your mind during the consideration of the various plans of treatment and specific remedies which will be passed in review.

In order to render it more easy for you to embrace the views it is intended to present to you, the same division of the disease will be adopted as was resorted to when describing it. Commencing with the mildest form as affording the type of its character and treatment, we shall be better able afterwards to proceed to the consideration of the graver cases.

In the *simple* form of scarlet fever, where there is merely some vascular excitement, disturbance of the digestive functions, the eruption of the skin and redness of the mucous membrane, without swelling of the throat, nothing more is needed than a mild laxative, followed by a gentle refrigerant and diaphoretic treatment, with the avoidance of fatigue and exposure and the adoption of a careful diet, not only during the four days of febrile action, but until the desquamation is complete. A dose of good calcined magnesia, adapted to the age and other peculiarities of the patient, should be given on the first day of the disease. Lemonade, if the taste of the patient desire it, may be used freely as a drink, and it may be prepared either with simple boiling water, or with barley or rice water; and in either case may be rendered more grateful by the addition of ice. In the case of infants and young children, ice water or gum water is more acceptable than either. As a diaphoretic, the common neutral mixture, prepared with the natural lemon-juice and carbonate of potash, and not with the citric acid of the chemist, is very useful. The addition to this mixture of a small quantity of the spirit of nitrous ether is of service, as it not only increases the tendency to moisture of the surface, but also promotes the secretion of urine, which you remember is liable to be diminished towards the close of the disease. This secretion has also been found to be more acid in this disease than in health, and the use of an alkali was therefore suggested. To meet this indication, the carb. of soda has been much employed, and I can assure you that very many cases have passed through my hands to my entire satisfaction, in which no remedy was employed beyond the weak solution of this salt with the addition of sweet spirits of nitre. I am in the habit of directing the solution of a teaspoonful of the soda in a tumblerful of water, to which one teaspoonful of sweet spirits of nitre is added, and give from one teaspoonful to a dessert-spoonful every hour or two, according to the age of the patient. In these milder cases, the appetite is often but little impaired, and it is therefore important to guard against impropriety in indulgence. I am much in the habit of directing for children the cake known in this city as "lady finger" or Naples' biscuit, which contains nothing but wheat flour with a little sugar and egg; or a thin

slice of stale bread toasted quickly; or the biscuit known as "dried rusk," with milk diluted with boiling water sweetened, for the morning and evening meal. Where the fever is very slight, milk-toast without butter may be permitted. It is better that the midday meal should be of the same character if it can be accomplished; and no animal matter, either solid or in the shape of broth or soup, should, on any account, be allowed during the first four days. Where grapes and oranges are accessible, they may be freely used; care being taken that the skins and pulp are not swallowed; and you will find the indulgence of the child in these harmless articles will much abate the desire for other food.

Where the case is more severe and the nervous system more deeply implicated, and we have to contend with muscular twitching, or trembling, or delirium, you will derive the greatest possible benefit from cutaneous ablutions, to be employed conjointly with the treatment first indicated. No slight diversity of opinion with respect to this practice has been expressed by medical writers and practitioners. Under the erroneous impression that some morbid matter was present in the fluids which was to be eliminated by the skin, some have objected to the application of water to the surface, on the ground of its tendency to resist this action; whilst others have feared to resort to it lest it should diminish the cutaneous activity, and produce a transfer of the disease to the nervous centres. Both these views are founded on false notions of the pathology of the disease, and experience has fully proved the apprehensions they suggest are without foundation. Equally great has been the difference of opinion as to the mode of application of water. You must in this, as in all other cases, adapt your application to the object you have in view, and the circumstances of the individual case. In the large majority of instances, the object to be attained is merely the abstraction of heat from the surface, and the consequent diminution of nervous excitement. This may be obtained with the greatest comfort to the patient and least inconvenience to the attendants, by simple sponging with water. It will allay the heat, sooth the tormenting itching of the surface, and reduce the fequency of the pulse. The temperature of the fluid should be adapted to the sensations of the patient. There are

great constitutional peculiarities as regards the influence of temperature on the surface. While some persons in health enjoy a high temperature, and find all their functions performed with most comfort during the warm season, others are then languid and oppressed, and long for the return of the cold weather. In the use of baths, a like diversity is found. The languor and depression which in one person will follow the resort to cold bathing, will in another result in equal degree from the employment of the warm bath. Now these same constitutional peculiarities are carried into the hours of sickness. Tepid sponging may always be employed with benefit where the skin is hot and dry, the pulse quick and strong, and the patient restless. Affusion of water at a temperature not less than 96° or 98° of Fahrenheit, will in most similar cases be very beneficial, and this especially in those patients where there is great restlessness and delirium. It allays nervous irritability, and is often followed by refreshing sleep. Currie, of Liverpool, has advocated the use of *cold* affusions in this disease in very strong terms, and he has been followed in this recommendation by other writers. The preponderance of testimony is, however, against it, and it appears to me to be founded on imperfect views of the operation of cold. We are all familiar with the fact, that its primary impression is sedative. This cannot, however, be long maintained without producing serious depression of the vital force. When it is interrupted before this exhaustion is brought about, the result is increased action of the general circulation, and also of the capillaries of the part to which it has been applied. Both these conditions are injurious in scarlet fever: and at the best the cases reported by Dr. Currie prove only that no mischief resulted, since the most he claims is the final abatement of the fever on the fourth day. The remarks of Dr. Chapman on this subject are characterized by that sound discretion, for which he is so remarkable. Especially adapted, in his opinion, to these cases in which the nervous system is most deeply involved, he asserts that he has derived from the application of cold water to the surface, more positive benefit, than from any other remedial measure he has employed. There is one set of cases to which it is peculiarly appropriate; I allude to those in which there is violent delirium, with great heat of skin, very rapid pulse, and extreme restlessness, and not unfrequently con-

vulsions, or at the least violent muscular twitching. Bleeding, whether local or general, is in such cases almost always followed by fatal results. But a cold douche to the head, maintaining the impression by cloths wrung out of iced water, while the whole surface is freely sponged with that fluid at the temperature of the chamber, or but little below it, will do more to procure tranquillity and reduce the nervous excitement, than any other plan that can be adopted. Much important testimony to the value of this treatment, variously modified, might be adduced. By Dr. J. Forsyth Meigs the employment of affusion of water at 96°, containing a small quantity of vinegar, is mentioned with approbation. I have long resorted to baths from 96 to 100°, to which whiskey has been added as a means of tranquillizing young children, and inducing sleep. You will bear in mind that the temperature of the surface in this disease is much exalted above the natural standard of health. When then you resort to the application of water which feels warm to the hand of the person who uses it, it is yet so far below the temperature of the patient that it abstracts heat from the surface, and hence it is that apparently tepid sponging is followed by nearly the same results as those ascribed to more positive cold, and the shock being less it is not so liable to be followed by pernicious reaction. It diminishes the capillary excitement, and maintains a more healthy condition of the cutaneous functions; the interruption to which exerts so baneful an influence on the subsequent course of the disease. The influence of these results on the disease appear sufficiently great to account for the benefit conferred, without adopting the suggestion of Dr. Chapman, that "while mitigating undue excitement by its sedative agency, it also proves more directly the corrective of the effects of the specific virus causing the disease;" to which I draw your attention only for the purpose of exhibiting how high is the estimate he places on this mode of treatment. Dr. Condie is equally decided in the expression of his confidence in it; and Dr. Bell, in his work on baths, asserts "there is no other remedy which unites to any thing like the same extent, efficacy with safety, and immediate pleasurable results, as the cold bath."

If you bear in mind the importance of the functions of the skin, and the great influence the interruption of them must have

upon the condition of the circulating fluids, and the nervous centres, you will not think undue prominence is given to this remedial agency. More recently, similar views have led to the adoption of a practice, which, though highly lauded by some of my professional friends who have employed it, when first presented to the mind has no very strong claims to regard. I allude to the employment of inunctions, originally suggested by a German author in the offensive shape of rubbing with the skin of fat bacon. It is rendered less disgusting when modified, as by a recent English writer, who commends it as equally applicable to all febrile diseases, and resorts to an ointment composed of equal parts of suet and lard, which is to be rubbed into the dry skin by vigorous friction. Whatever benefit may accrue from this practice, it can be ascribed only to the soothing influence of the unctuous application to the skin, which acts here as in erysipelas, in which it certainly allays the local irritation, and thus by the removal of one important cause of excitement, may tend to the subduing of the febrile action. How far it may be applicable to the latter stages of the disease, and to those cases in which the sedative influence of cold would be pernicious, I am not prepared to express an opinion; though analogy affords many examples, which might, perhaps, induce some to think favorably of the practice as modified by Mr. Taylor, and to give it a trial, not only in scarlet fever, but in other febrile diseases, with a dry, husky condition of the skin. Nothing can be conceived less likely to promote the restoration of a patient than the German practice as reported in Ranking's Abstract. Not only is the material used for anointing the skin offensive in itself, but directions are given that the clothing should not be changed, "as a clean shirt takes up more of the fatty matter than one already saturated. The rubbing in is to be kept up twice a day for *three weeks*, and once a day *during the fourth*. The patient is, *after this*, to be washed daily with soap and cool water, and then only is the warm hip bath to be commenced." It would require the utmost confidence of success, to reconcile an American mother to such treatment, or induce an American physician to make his daily visits to a chamber so foul. Whatever benefit might accrue from the softening of the cuticle, would be more than balanced by the loathsome effluvia. Nor does the length of time during which the

application is to be made, convey an impression at all favorable to the remedial influence of this mode of treatment.

You will thus observe, that in the treatment of the simple form of scarlet fever, I am inclined to adopt a very simple treatment, even in those cases in which some symptoms of a very formidable character present themselves. Emetics recommended by some, may be harmless if employed in the very onset of the disease, when the spontaneous vomiting by which it is often ushered in, would appear to afford a natural indication for their use. If the stomach is known to be loaded with some improper food, or if the effort at vomiting is unsuccessful, a small dose of ipecacuanha may be given to aid in the expulsion of the contents of the stomach. I have never found it necessary to resort to them except in those cases which are ushered in by convulsions as the primary symptom, and which in their onset cannot be known to be scarlet fever, unless some direct communication with the disease, or its presence in the family, should give occasion for suspicion. In either case, the object to be accomplished by the emetic is very simple.

You may remember that when treating of the cause of the disease, I referred to the fact that it is often developed by some agency independent of the specific influence which gives to it its essential character. Whatever disturbs the healthy balance of the system, may thus prove the origin of a case; and among children nothing more frequently acts thus, than impropriety in diet, whether in quantity or quality. Digestion is suspended for the time, either from having been taxed beyond its normal power, or from the depressing influence of the scarlet fever miasm. In either case the presence of the ingestæ in the stomach becomes a source of irritation, which greatly aggravates the danger of the patient. The more promptly this offending matter can be discharged the better; and a dose of ipecacuanha, proportioned to the age of the patient, should be given the moment the power of deglutition is restored. Such cases generally occur in childhood or infancy. The body should be immersed in warm water, while a cold cloth is applied to the head, or cold water poured upon it from a slight elevation. This will almost always suspend the spasmodic action sufficiently long to permit the swallowing of the ipecac. which acts as a simple evacuant.

Purging, beyond the mere evacuation of the bowels as suggested, by magnesia, is positively injurious, and the use of calomel in this disease is, I think so deleterious, that if I were in doubt as regards a case, whether it were scarlet fever or no, I should think the doubt sufficient cause for withholding the use of that remedy, so great is the depressing influence it exerts in its primary impression. There is, in fact, no indication to be met by the use of purgatives; certainly none demanding the resort to mercurials. Neither the symptoms present, nor the results of examination of the bodies of the dead, afford any reason to suspect the presence of those disorders of the viscera, either functional or organic, to the relief of which this remedy is so well adapted. The depressing influence of calomel, and the irritation of the mucous membrane by the other cathartic remedies are both injurious. Bleeding is better endured in the simple form of the disease than in any other. But when the case is not violent it is unnecessary, and if it assumes a deeper grade of severity, my personal experience is very decidedly unfavorable to its employment. I have never seen any good result from it, even in those cases in which the nervous symptoms were most severe, and the vascular excitement the most intense, and I have, alas too frequently! had occasion to mourn over its fatal influence. The impression of cold will, in these cases, be always sufficiently sedative to allay the nervous excitement; and neither analogy nor direct examination of the results on the bodies of those who die, affords any reason to suspect the existence of cerebral inflammation in them. In almost every instance in which I have resorted to depletion, either local or general, in cases of scarlet fever in the primary stages of the disease, no matter how vigorous the patient, or violent the symptoms, the case has had a fatal termination; and in no cases has its evil influence been more manifest than in those in which convulsions or violent delirium, accompanied by sudden shrieks and grinding of the teeth, as in meningitis, would appear to have presented the strongest possible reason for a resort to it. You will find I place an entirely different estimate on the value of depletion in the treatment of the sequelæ of this disease.

Permit me to describe to you one case which occurred in what might be properly termed the transition stage of my views of the

treatment of this disease. It will illustrate, at the same time, the character of a severe attack of *simple* scarlet fever. The subject was a healthy boy, five years old. He had retired to bed in his usual health. About daylight I was called to see him with convulsions. I found him wholly insensible, with violent spasmodic action of the whole body and all the extremities, pupils contracted, pulse frequent, and skin hot. Though it was impossible to arouse his attention, yet the least disturbance, as in moving him, or administering an enema, produced increased convulsions followed by long continued muscular tremor. On enquiring into the history of the attack, I was informed he had been waked up by sick stomach, and the convulsions had occurred whilst he was in the act of vomiting. Portions of an apple eaten on the previous day were ejected just as he had swallowed it, imperfectly masticated. Supposing the case to be one entirely dependent on indigestion, so frequent among young children, I adopted the treatment appropriate to its relief. A stimulating injection was promptly administered, and the child removed to a warm bath; and so soon as it could be procured, a dose of calomel and ipecacuanha was given during an interval between the convulsions, while mustard cataplasms were applied to the extremities and epigastrium for the purpose of revulsion. At the end of two hours he vomited again, throwing off an additional quantity of undigested apple; soon after which he recovered his consciousness, so far only as to protrude his tongue when solicited to do so. He neither spoke nor manifested consciousness in any other manner. He continued through the day to start much, and manifested no knowledge of the action of the bowels produced by a dose of magnesia given soon after the operation of the emetic. As the convulsions did not return, and the pupils recovered their natural condition, I determined to rely on the counter-irritation of a blister, which was applied to the nape of the neck, and cool cloths kept constantly on the forehead, and to wait for the full effect of the purgative. The pulse continued very rapid throughout the day. The following morning I found him with a vivid eruption on the face and neck, conjunctiva injected, eyes upturned, and pupils contracted, pulse very rapid. The tendons of the wrist twitched incessantly under the finger; he started frequently as though about to spring off the bed, and grated his teeth with much violence.

It was impossible to arouse him; and his pulse was still as frequent as on the previous day. There could be no hesitation in recognizing scarlet fever, even if the tongue had not assumed the peculiar appearance which is so common in that disease. There was, however, no evidence of angina, except some little shrinking on passing the finger beneath the angle of the jaw. The cerebral symptoms were certainly urgent, and appeared to demand the most energetic treatment. In any other disease than scarlet fever, I should not have hesitated to resort to free depletion. Sad experience in several cases, which had then recently passed through my hands to a fatal termination, in which the convulsions and delirium had been even more violent, had led me to determine never again to employ depletion in such cases. I explained to the father my views of the case, told him the result of my observation, assured him of my readiness to meet any other physician of experience and good judgment in consultation on the case, or even, if he desired it, to yield the treatment to another; that if I employed any depletion, it must be to the smallest possible extent. Twelve leeches were applied to the temples, by which but about one ounce and a half of blood was abstracted—and the case was then committed to a mere expectant treatment. The rash was fully developed. There was no affection of the throat, beyond that which was indicated by the tenderness on pressure. The coma gradually subsided from hour to hour, till, on the fifth day, the symptoms all disapeared, and convalescence was fairly established. The favorable result of this case afforded me much encouragement. While in every instance in which active depletion had been employed by me for the relief of the cerebral symptoms, death had ensued; here was a propitious result, though the amount of blood drawn was too small to be entitled to any part of the credit of the case. I was thus confirmed in the opinion, that the cerebral symptoms were purely nervous, and had no connection with inflammation, or even vascular congestion. That the proper indication was only to allay nervous irritation, and to avoid every agent which should prostrate the vital energies. I accordingly from that time adopted a treatment having this object in view, in all similar cases, and have no hesitation in expressing myself entirely satisfied with the result.

I should now not employ even the calomel which was added to

the ipecacuanha in this case, under the impression that it was wholly dependant on gastric disturbance,—but should rely on the simple evacuants, to get rid of the ingestæ; following them by the tepid bath or affusion, and the use of simple drinks, with entire rest. You will observe that the *whole train* of morbid phenomena disappeared as the case approached the period at which scarlet fever terminates. I saw it first before daylight on the morning of Tuesday, and on Saturday convalescence was fairly established. To sum up the treatment of simple scarlet fever, I should adopt and recommend that of Dr. Armstrong: "Open the bowels (*not purge*) every day with some mild aperient," (if spontaneously opened, there is no need of medicine). "Keep the patient at rest, between cool clean sheets, on a bed or on a mattress with light clothing, and in a temperature from 56° to 60° F. Sponge the surface with tepid water twice or three times a day, while it is hotter than natural. Admit plenty of fresh air, allow a bland diet, and in two or three days the patient will be well." Above all, do not allow the dread of the name scarlet fever to induce you to adopt a treatment which shall be more injurious than the disease.

(To be continued.)

Case of Malformation in a Child. By M. Emanuel, M. D. Marcus Hook, Pennsylvania.

I was called to attend Mrs. H. in labor with her fifth child, and in about an hour she was delivered. In dividing the cord, I observed some malformation about the umbilicus, and as there was considerable flooding, I handed the child over to the nurse, and said nothing until after the expulsion of the placenta, to the upper end of which was attached a sac, containing a pint of coagulated blood. As soon as the mother was relieved, I examined the child, which had the following singular malformation: at each side of the umbilical opening, two small glands projected half an inch externally, resembling the testes, and very vascular. There was no penis, but a well formed scrotum, without testes, and no orifice at the anus. The right leg, from the knee joint to the ankle, was half the length of the other, and in place of a foot, there was a continuation of cartilaginous substance about four inches in length, resembling a finger,

with an extensor and flexor attached to the end, moveable at will. I made an incision in the perineum, and introduced a female catheter without any difficulty, three inches up the rectum, but no discharge came away. Before leaving, I left directions with the nurse to notice if the child had any evacuations, and where they escaped. In all other respects it was a fine healthy looking child. I thought I would not say any thing to the mother at the time; but as I was leaving the room, she inquired if the child was marked with the figure of horse, as she said that a little before she found herself in the family way, she had a fright; that one of her children had fallen between the horse and cart, and she fancied the horse had kicked him and forced his entrails out. This impression was strongly on her mind during the whole period of her pregnancy, although the boy was very little hurt. On visiting her the next day, the nurse said the child took some food, was very lively, and that it had passed both urine and feces, but that it all escaped at the navel. On making further examination, I noticed something of the shape and size of a French bean between the two small glands before mentioned, with an orifice in the centre of the flat surface from which the urine escaped. On the second and third day the child took the breast, the evacuations continuing as before, although the passage into the rectum was perfectly free. On the night of the third day the child was taken sick, and died on the fourth day after its birth. I visited her every day, though several miles from my residence, with the intention of obtaining the child after its death, for the purpose of making a preparation. Unfortunately, on that day I was so much engaged that I could not get there, and they buried it immediately, I know not where, to prevent my having it. You are aware how difficult it is for country practitioners to get a post mortem examination, or obtain parts for preparation.

Marcus Hook, Del. Co. June, 1851.

Representation in the American Medical Association. By T. H. YARDLEY, M. D., Philadelphia.

To the Editors of the Medical Examiner:

GENTLEMEN—I will be obliged if you will correct an error in your last number, in relation to the resolution offered by me at the late meeting of the "American Medical Association," in Charleston.

The following are the preamble and resolution as offered, and adopted by the Philadelphia County Medical Society, viz:

"Whereas, The Constitution of the American Medical Association, by providing for the reception of delegates from 'permanently organized Medical Societies, Medical Colleges, Hospitals, Lunatic Asylums, and other permanently organized Medical Institutions,' unjustly favours the profession in cities, where such institutions exist and are readily formed, and diminishes the importance and thereby discourages the establishment of County Medical Societies in rural districts;

Resolved, That the Constitution of said Association should be so amended as to admit only delegates from County or State Medical Societies."

While on the subject, I will, with your permission, correct an error which exists in regard to the object of those who introduced this resolution; we do not desire, as has been asserted, to exclude *Professors* from the Association; we wish, in the language of Dr. Drake, "to *popularize*" the Association with the profession in the United States, by transacting the business on purely republican principles.

As the Constitution stands, the ratio of representation is more than three times as great from Medical Schools, Hospitals, &c., as it is from the mass of the profession in County Medical Societies: this is productive of jealousy, and we hear the epithets of laymen and professors as at Cincinnati; or a jealousy exists between rival schools, and we have the professors of one school protesting against the admission of delegates from another Medical School, as was the case during the last meeting in Charleston.

Physicians are the best judges of the moral worth and profes-

sional respectability of their fellow practitioners; but by the present Constitution, the members of a County Medical Society may unanimously exclude a number of physicians from membership with them, and the rejected applicants may immediately organize themselves into a medical association, or obtain a charter for a medical school, and send one-third of their number as delegates to the American Medical Association.

Members of County Medical Societies now will not vote for Professors as delegates, because they consider they may be sent by their respective schools; and Professors neglect or refuse to join County Medical Societies, because they conceive they are excluded from its honors. But if the proposed alteration in the constitution is effected, professors who love their profession and feel an interest in the Association will join County Medical Societies, and, in return, the societies will be proud to send them as delegates, for they generally are, and always should be, the most intelligent and respectable of the profession.

Let the physicians of every county in the United States form themselves into a society, and have their constitution approved by the Censors of the State Society; let the constitutions of all State Societies be approved by Censors appointed by the American Medical Association; let every member of a county society be considered a member of the State Society and of the American Medical Association, and receive certificates of membership, and contribute to their funds. Then will we have realized the exalted ideas of Professor Meigs: we will have from ten thousand to forty thousand members, without any privileged classes among us, but each one will be entitled to his vote in the choice of delegates, and each one will contribute his share to the common fund; giving us an income of from ten thousand to two hundred thousand dollars, sufficient to reward labor and encourage enterprise, and thus give us incalculable influence and power.

A certificate of membership from the great "American Medical Association," will then be of more value to a young man than all the diplomas of all the medical schools in the country, for the inquiry will not be, is he a graduate? but, is he a member of the *American Medical Association?* Do the respectable physicians who are his immediate neighbors, and who are best qualified to judge, regard him as an intelligent, educated, honorable man,

with whom they are willing to have professional and social intercourse? or do they regard him as an ignorant, uneducated man, or one who would resort to any means, however dishonorable, for the purpose of obtaining practice and popularity?

There are other arguments in support of the resolution, but it has been referred to a committee, the intelligent chairman of which, I have no doubt, will place the subject in its true light. I have only attempted to correct an error and to "define our position;" but as it is an important alteration in the constitution to be acted on at our next meeting, I think it is proper that the profession should discuss the matter, and that medical societies particularly should express their opinion.

Very respectfully, &c.,

June 15th, 1851. THOS. H. YARDLEY.

[The following history was handed to us by a friend as a medical curiosity. It was published upwards of fifty years ago in the Gazette of the United States and Philadelphia Daily Advertiser; as it may be *new* to some of our readers, we are induced to give it place.—EDS.]

Account of a man who lives upon large quantities of raw flesh. In a letter from Dr. Johnston, Commissioner of Sick and Wounded Seamen, to Dr. Blane.

Somerset Place, Oct. 18, 1798.

MY DEAR SIR,—Having in August and September last been engaged in a tour of public duty, for the purpose of selecting from among the prisoners of war such men as, from their infirmities, were fit objects for being released without equivalent, I heard, upon my arrival at Liverpool, an account of one of those prisoners being endowed with an appetite and digestion so far beyond anything that had ever occurred to me, either in my observation, reading, or by report, that I was desirous of ascertaining the particulars of it by ocular proof or undeniable testimony. Dr. Cochrane, Fellow of the College of Physicians of Edinburgh, and our medical agent at Liverpool, is fortunately a gentleman upon whose fidelity and accuracy I could perfectly depend, and I requested him to institute an inquiry upon this subject during my stay at that place. I enclose you an attested copy of the

result of this—and as it may probably appear to you, as it does to me, a document containing facts extremely interesting, both in a natural and medical view, I will beg you to procure its insertion in some respectable periodical work.

Some farther points of inquiry respecting this extraordinary person having occurred to me since my arrival in town, I sent them in the form of queries to Dr. Cochrane, who has obligingly returned satisfactory answers. These I send along with the above mentioned attested statements, to which I beg you to subjoin such reflections as may occur to you on this subject.

I am, my dear Sir, your most obedient humble servant,

J. JOHNSTON,

To Gilbert Blane, M. D., F. R. S.,
and one of the Commissioners of Sick and Wounded Seamen.

Charles Demery, a native of Benche, on the frontiers of Poland, aged 21, was brought to the prison of Liverpool, in February, 1799, having been a soldier in the French service on board the Hoche, captured by the squadron under the command of Sir John B. Warren, off Ireland.

He is one of nine brothers, who, with their father, have been remarkable for the voraciousness of their appetites. They were all placed early in the army—and the peculiar craving for food with this young man, began at thirteen years of age.

He was allowed two rations in the army, and by his earnings or the indulgence of his comrades, procured an additional supply.

When in the camp, if bread or meat was scarce, he made up the deficiency by eating four or five pounds of grass daily—and in one year, devoured 174 cats (not their skins) dead or alive—and says he had several severe conflicts in the act of destroying them, by feeling the effects of their torments on his face and hands—sometimes he killed them before eating, but when very hungry he did not wait to perform this humane office.

Dogs and rats equally suffered from his merciless jaws—and if much pinched by famine, the entrails of animals indiscriminately become his prey. The above facts are attested by Picard, a respectable man, who was his comrade in the same regiment on board the Hoche, and is now present—and who assures me, he has often seen him feed on those animals.

When the ship on board of which he was, had surrendered after an obstinate action, finding himself, as usual, hungry, and nothing else in his way but a man's leg, which was shot off, lying before him, he attacked it greedily, and was feeding heartily, when a sailor snatched it from him, and threw it overboard.

Since he came to this prison, he has eat one dead cat and about twenty rats. But what he delights most in, is raw meat, beef or mutton, of which though plentifully supplied by eating the rations of ten men daily,* he complains he has not the same quantity, nor indulged in eating so much as he used to do, when in France.

He often devours a bullock's liver, raw, three pounds of candles and a few pounds of raw beef in one day, without tasting bread or vegetables, washing it down with water, if his allowance of beer is expended.

His subsistence at present, independent of his own rations, arises from the generosity of the prisoners, who give him a share of their allowance. Nor is his stomach confined to meat, for when in the hospital, where some of the patients refused to take their medicines, Demery had no objection to perform this for them—and his stomach never rejected anything, as he never vomits, whatever be the contents, or however large.

Wishing fairly to try how much he actually could eat in one day; on the 7th of September, 1799, at 4 o'clock in the morning, he breakfasted on four pounds of raw cow's udder—at half past 9, in presence of Dr. Johnston, commissioner of sick and wounded seaman, Admiral Child and his son, Mr. Foster agent for prisoners, and several respectable gentlemen, he exhibited his powers as follows: There was set before him five pounds of raw beef, and twelve tallow candles of a pound weight, and one bottle of porter—these he finished by half past 10 o'clock. At 1 o'clock there was again put before him, five pounds of beef, and one pound of candles, with three bottles of porter, at which time he was locked up in the room, and sentries placed at the windows to prevent his throwing away any of his provisions. At 2 o'clock, when I

* The French prisoners of war are at this time, maintained at the expense of their own nation, and are each allowed the following daily ration—twenty-six ounces of bread, half a pound of beef, half a pound of greens, two ounces of butter, or six ounces of cheese.

again saw him with two friends, he had nearly finished the whole of the candles, and great part of the beef, but had neither evacuation by vomiting, stool, or urine; his skin was cool and pulse regular, and in good spirits. At a quarter past 6, when he was to be returned to his prison, he had devoured the whole, and declared he could have eat more, but from the prisoners without telling him we wished to make some experiments on him he began to be alarmed. It is also to be observed, that the day was hot, and not having his usual exercise in the yard, it may be presumed he would otherwise have had a better appetite. On recapitulating the whole consumption of this day, it stands thus:—raw cow's udder, 4 lbs.; raw beef, 10; candles, 2. Total, 16 lbs. besides 5 bottles of porter.

The eagerness with which he attacks his beef when his stomach is not gorged, resembles the voracity of a hungry wolf, tearing off and swallowing them with canine greediness. When his throat is dry from continued exercise, he lubricates it by stripping the grease off the candle between his teeth, which he generally finishes at three mouthsful, and wrapping the wick like a ball (string and all) sends it after at a swallow. He can, when no choice is left, make shift to dine on immense quantities of raw potatoes or turnips; but from choice would never desire to taste bread or vegetables. He is in every respect healthy, his tongue clean, and his eyes lively.

After he went to the prison, he danced, smoked his pipe, and drank a bottle of porter—and, by four next morning, he awoke with his usual ravenous appetite—which he quieted by a few pounds of raw beef.

He is six feet three inches high, pale complexion, grey eyes, long brown hair, well made but thin, his countenance rather pleasant, and is good tempered.

DESTAUBAN, French Surgeon.
LE FOURNIER, Steward of the Hospital.
REVET, Commissaire de la Prison.
LE FLEM, Soldat de la ser Demi Brigade.
THOMAS COCHRANE, M. D., Inspector and Surgeon of the Prison, and Agent, &c., for sick and wounded Seamen.

Liverpool, Sept. 9th, 1799.

A true copy, JOHN BYNON,
Clerk in the office for sick and wounded Seamen.

Queries and Answers.

1. What are the circumstances of his sleep and perspiration?

He gets to bed about 8 o'clock at night, immediately after which he begins to sweat, and that so profusely as to be obliged to throw off his shirt. He feels extremely hot, and in an hour or two after he goes to sleep, which lasts until one in the morning, after which he always feels himself hungry, even though he had laid down with a full stomach. He then eats bread or beef, or whatever provision he may have reserved through the day; and if he has none, he beguiles the time in smoking tobacco. About 2 o'clock he goes to sleep again, and awakes at 5 or 6 o'clock in the morning in a violent perspiration, with great heat. This quits him on getting up; and when he has laid in a fresh cargo of raw meat (to use his own expression) he feels his body in a good state. He sweats while he is eating; and it is probable owing to this constant propensity to exhalation from the surface of the body, that his skin is commonly found to be cool.

2. What is his heat by the thermometer?

I have often tried it, and found it to be of the standard temperature of the human body. His pulse is now 84, full and regular.

3. Can this ravenous appetite be traced higher than his father?

He knows nothing of his ancestors beyond his father. When he left the country, eleven years ago, his father was alive, aged about 50, a tall, stout man, always healthy; and he can remember he was a great eater, but was too young to recollect the quantity, but that he eat his meat half boiled. He does not recollect that either himself, or his brothers, had any ailment, excepting the small pox, which ended favorably with them all. He was then an infant. His face is perfectly smooth.

4. Is his muscular strength greater or less than that of other men of his time of life?

Though his muscles are pretty firm, I do not think they are so full or plump as those of most other men. He has, however, by his own declaration, carried a load of 300 weight of flour in France, and marched 14 leagues in a day.

5. Is he dull or intelligent?

He can neither read nor write, but is very intelligent and conversable, and can give a distinct and consistent answer to any question put to him. I have put a variety at different times and in different shapes, tending to throw all the light possible on his history, and never found that he varied, so that I am inclined to believe that he adheres to the truth.

6. Under what circumstance did his voracious disposition first come on?

It came on at the age of thirteen, as has been already stated. He was then in the service of Prussia at the siege of Thionville; they were at that time much straightened for provisions, and as he found this did not suit him, he deserted into the town. He was conducted to the French General, who presented him with a large melon, which he devoured, rind and all, and then an immense quantity and variety of other species of food, to the great entertainment of that officer and his suite. From that time he has preferred raw to dressed meat; and when he eats a moderate quantity of what has been roasted or boiled, he throws it up immediately. What is stated above, therefore, respecting his never vomiting, is not to be understood literally, but imports merely that those things which are most nauseous to others, had no effect upon his stomach.

There is nothing farther to remark, but that since the attested narrative was drawn up, he has repeatedly indulged himself in the cruel repasts there described, devouring the whole animal, except the skin, bones, and bowels; but this has been put a stop to, on account of the scandal it justly excited.

In considering this case, it seems to afford some matters for reflection, which are not only objects of considerable novelty and curiosity, but interesting and important, by throwing light on the process by which the food is digested and disposed of.

Monstrosity and disease, whether in the structure of parts or in the functions of appetite, illustrate particular points of the animal economy, by exhibiting them in certain relations in which they are met with in the common course of nature. The power of the stomach in so quickly dissolving, assimilating and disposing of the aliment in ordinary cases, must strike every reflecting person with wonder, but the history of this case affords a more

palpable proof, and more clear conception of these processes, just as objects of sight become sensible and striking, when viewed by a magnifying glass, or when exhibited on a larger scale.

The facts here set forth, tend also to place in a strong light, the great importance of the discharge by the skin, and to prove that it is by this outlet, more than by the bowels, that the recrementitious parts of the aliment are evacuated; that there is an admirable co-operation established between the skin and the stomach, by means of that consent of parts so observable; and so necessary, in the other functions of the animal economy; and that the purpose of aliment is not merely to administer to the growth and repair of the body, but by its bulk and peculiar stimulus to maintain the play of the organs essential to life.

BIBLIOGRAPHICAL NOTICES.

Illustrations of Syphilitic Disease. By PHILIP RICORD, D. M. P., &c. &c. *Translated by* THOMAS F. BETTON, M. D., &c.; *with the addition of a History of Syphilis, and a complete Bibliography and Formulary of Remedies, collected and arranged by* PAUL B. GODDARD, M. D., &c. *With Fifty large Quarto Plates, comprising* 117 *beautifully colored Illustrations.* Philadelphia. A. Hart (late Carey & Hart) 126 Chestnut street, 1851. pp. 383, 4to.

"If there is one disease which, more than another, merits the distinction of the term *opprobrium medicorum*, that disease is syphilis." So said a leading British reviewer some thirteen years ago, when the researches and new lights of Ricord were just struggling into notice.

"For little less than three centuries and a half," continues the reviewer, "it has monopolized a share of medical literature nearly as large as all the remaining members of the nosological family put together. And what has been effected by all these labors?" The best answer to this question has long since been again and again afforded, by the various publications of the

champion of inoculation and speculum examinations, and by those of his disciples, as well as by the discussions and investigations to which they have given everywhere a powerful impulse. Above all, has it been signally and triumphantly replied to in the famous *Clinique Iconographique de l'Hôpital des Vénériens*, of which the "Illustrations" above announced are the admirable re-print and translation.

In this splendid production of the most celebrated syphilographer of the age, we have not only an ample vindication of our profession against the aspersion of "*opprobrium*," but a striking evidence, at once, of the disheartening nature of the malady itself, as the terror and scourge of evil doers, and of the certainty with which it may be followed and controlled, in many of the phases that formerly served only to puzzle the physician and horrify his patient.

M. Ricord's *Clinique Iconographique* may be regarded as the most complete epitome and practical exemplification of his views and course of investigation, upon all the great questions connected with the study of venereal disorders. Its pictures, whether of the pen or pencil, are drawn with characteristic force and aptness of purpose, from the actual and daily life of his hospital and private practice. It seems to have been his labor of love and the pledge of his professional supremacy, in the speciality to which he has been so long and so efficiently devoted. On all these accounts it would be hailed with acclamation, as the richest offering of its able author. But it is destined to become vastly more popular and influential in every way because it presents in its unequalled lithographic colored plates by far the most beautifully natural and instructive series of demonstrations of syphilitic disease that has yet appeared. As mere specimens of scientific art these representations will vie with the finest essays of Cazenave and Wilson, or of any of the dermatologists or morbid anatomists of the day. It is unnecessary, however, to dwell upon their excellence here; the reputation of the original work is too thoroughly and universally established, to require any further mention of its chief attractions. These have long been operating for themselves, abroad and at home; and we are very sure that the transatlantic prototype is already rapidly winning its way, through similar causes, to a still more widely spread and effectual

renown. Many of our readers must have been accustomed to its concise but clear and full descriptions, and life-like and frightfully distinct delineations, as the different numbers issued, seriatim, from the Parisian press; and they will coincide with us in our agreable surprise in finding so excellent an imitation in the American counterpart, presented by the Philadelphia collator and translator.

These gentlemen, and their publishers have earned the thanks of the profession in this country in other ways not less than by the elegant and faithful version of their author's language, and the arrangement and very superior execution of the plates and letter press. They have materially increased the interest of the book, to American readers, by adding to the lessons of M. Ricord, an elaborate and curious history of syphilis, an extensive bibliography, and an extremely useful formulary of remedies. These additions, together with the occasional notes of Dr. Goddard, certainly have enhanced the value of the American edition, so much as to have conferred a double obligation on the American admirers of Ricord; even were the translation and the style of the illustrations less eminently praiseworthy than they unquestionably are.

No one will deny the usefulness of an undertaking which thus brings within the reach of the most contracted means, the best work of its kind in any language. Nor can we doubt the importance of the example thus strikingly afforded to less enterprising editors and publishers. We do not believe that a single venture of this sort has failed to secure an encouraging return for the most liberal outlay of trouble and expense, when these have been properly directed. Indeed, we are so convinced of the eventual success of all these first class publications, apart from their intrinsic value, that we are always glad to have an opportunity to aid them in their progress, and we unaffectedly regret, that in this particular instance, our really earnest wishes in behalf of Drs. Betton and Goddard's admirable offering, have been so unusually long in finding suitable expression.

We cannot undertake a critical analysis, or very detailed notice, but we hope to give some idea of its general scope, and of a few of its prominent and peculiar features. The plates, we are told, "amount to fifty in number, but several are accompanied

by two or more cases and illustrations, making the whole number of illustrated cases ninety-two." The originals were drawn and colored from life, under M. Ricord's particular direction, by Messrs. Emile Beau and F. Bion, Parisian artists of the highest standing. And they have been accurately and beautifully copied in this city, under direction of Dr. Goddard, at the establishment of P. S. Duval, and colored after the French by Mr. T. S. Jones.

Some changes have been made in the arrangement of the author, and a few of his plates and cases have been omitted in the American edition. These modifications may be immaterial and even advantageous to American readers, although we are not enlightened on the subject in the preface of the editors. They are none the less unfair to M. Ricord, however, since they necessarily impair the integrity of the production for which alone he holds himself responsible. The fault is venial enough in this case it is true, and it is handsomely atoned for in many ways; still it does appear to us a draw-back, and perhaps the more to be deplored because it stands alone.

In the present melancholy dearth of native literature, we may well be satisfied to make the most of transatlantic skill and learning in any form, within the limits of propriety. The interests of humanity are certainly advanced by such a course, and the circumstances of the country would seem to justify a reasonable use of all the means of improvement that are placed at our disposal, whether they be willingly accorded us or not by the master minds to whom we owe them. But in thus appropriating the intellectual treasures of richer lands than ours, let us at least so wear the borrowed plumes that they shall do no dishonor to their owners. If we must still feed upon the crumbs of European science, do let us have them as they fall,—fresh and free from the smoke and dust of the commentator's kitchen.

To return to our "Illustrations." The first seventy-four pages are occupied with the valuable additions of Drs. Betton and Goddard, which we have already mentioned as bona fide acquisitions, and entitled to high praise; especially as they are printed separately, and are distinctly acknowledged, so as not to interfere with the body of the work.

The introductory portions having been dispatched, we are

ushered in medias res, with a long succession of clinical reports and illustrative plates, which offer a most instructive series of lessons upon every thing connected with the different varieties, appearances, stages, localities, complications, treatment,—in a word, the whole history, theoretical and practical, of the subject. He treats, for instance, of primary ulcers, of primary follicular ulcers, primary indurated ulcers, diphtheritic, gangrenous, phagedænic, serpiginous, pultaceous, elevated indurated, annular indurated, indurated granulating ulcers, artificial inoculations, and accidental do.; of primary ulcers, in short, of every shape and kind. Then we have the various complications and accompaning constitutional disorders; such as virulent adenitis or bubo, acute adenitis, indolent ditto, phimosis, eczema of the glans, balanoposthitis, lymphitis, ulcerative adenitis, blenorrhagic urethritis, raspberry-like vegetations with phimosis and perforation of the prepuce, wart-like vegetations, perforating chancre of the frenum, paraphimosis, primary non-indurated ulcer of the upper gum, indurated chancre of the breast, &c. in a nurse, chancres of the anus, &c., &c. We have also an abundant display of syphilides, and of all other secondary symptoms, transition symptoms and tertiary symptoms. This brief and cursory list of topics will afford some idea of the range of clinical demonstration undertaken and successfully prosecuted by this energetic teacher. A glance at the list of contents, as well as the most hasty examination of the numerous figures on the plates, will convince any one of the thorough and comprehensive, and at the same time, strictly practical manner in which he has succeeded in dealing with his revolting theme. A more careful study of the letter press, will bring to the reader's attention another important feature of the book. This is, that M. Ricord in the course of his exposition of the great variety of cases, with the treatment appropriate to each, has managed to illustrate, and at some length to explain, the doctrines and special modes of practice which distinguish the now well established school of which he is the acknowledged head and founder; and which, in some respects at least, are now generally admitted to have had a decided influence upon the prophylactic, as well as therapeutic management of this horrible disease. Plates 2nd and 5th, for example, exhibit three different cases of previously unsuspected chancres on

the cervix uteri, and enable him to dwell upon the practical importance of examination by the speculum as the only reliable means of diagnosis in affections of the female sexual organs.

"Analagous cases," says he, "are more common than is supposed, and they are the more dangerous, insomuch that women, so long as the affection remains local and concealed, may thus transmit, in good faith, diseases which men contract, believing that the women with whom they have had connection were not diseased. This, again, is one source of error into which those have fallen who believe in the spontaneous origin of syphilis." Again, in relation to the third case, he remarks, "The suppuration to which they [non-indurated chancres of the neck of the uterus] give rise is abundant, sometimes sanious, may simulate a vaginal discharge, and give rise to a suspicion of blenorrhagia, and subsequently to the transmission of chancres to the male by a woman who had only a discharge." "How many errors of this kind," exclaims our author, "occured before I had made the use of the speculum so familiar in the study of venereal diseases! How many errors are still committed by those who prefer basing their diagnosis on the *story* of the patients, rather than seeking truth with more exactness." The great value of the speculum has long since been fully recognized and acted on; and we are told by the American editor, in a note upon the subject, that it has occurred to him to verify many times the conclusions drawn from these two preceding cases. Examinations by the speculum in doubtful cases have repeatedly resulted in the discovery of chancres very much to the astonishment of the patients who had submitted to the test with a full consciousness of their integrity, notwithstanding the disease which they had been suspected of communicating to their male companions.

In plates 1st, 2d, 3d, 4th, 5th, 6th, (the last two being incorrectly marked) 7th, (not marked at all), and 11th, (likewise not marked), we have, along with other matters of interest, distinct representations of various forms and stages of artificial and accidental inoculation, which forcibly remind us of M. Ricord's greatest triumph in the study of syphilitic diseases.

Plate 9th is occupied with the appearances of the affected parts in two remarkable cases of urethral chancres accompanied with blenorrhagic discharges, which had been fatal to the patients,

and had thus afforded an opportunity for a conclusive demonstration of what he had long insisted on, the positive existence of the *chancres larvés*, or hidden primary sores within the region of ordinary gonorrhœa. These two important cases were made the subject of a special memoir to the Academy of Medicine, which was reported on adversely in a long counter-argument by M. Lagneau and M. Cullerier. This counter-report is quoted by the author, in conjunction with the history of the cases, and with a summary rejoinder and a synopsis of his syphilo-graphic creed. Here then we have within the compass of a few pages the pith and substance of the inoculation question and its dependent corollaries. Let us hear M. Ricord's conclusions, as briefly stated at the close of his reply to M. Lagneau. A few words in advance, however, from M. L.'s report would not be out of place. He admits that M. Ricord, having had his attention strongly directed to the occasional occurrence of specific ulcers in the male urethra, accompanied with a blenorrhagic flow and sometimes apparently masked by a genuine gonorrhœa, was induced to repeat his researches on the genital organs of women, and ascertained by repeated application of the speculum that chancres frequently existed deep in the vagina, and even on the os uteri itself. This fact being once established—and it would no longer seem doubtful—continues the reporter, "it follows naturally that similar ulcerations should be found in the urethra of men laboring under blenorrhagia more frequently than has been supposed." After a further exposé of M. Ricord's course of reasoning, he goes on to say, "Therefore that deep-seated chancres of the male urethra, or chancres hidden and masked under the guise of blenorrhagia alone, according to M. Ricord, constitute the virulent blenorrhagia of authors, was in his opinion, proved by the result of inoculation, by the most exact analogy and the closest logic. Pathological anatomy was still waiting to complete the triumph. His last crowning argument he has to-day brought foward for the second time." Then follows a short sketch of the cases for which we refer our readers to the book itself.

"Our colleague adds," continues the report, "If to these convincing proofs, it be added that the bubo which accompanies a blenorrhagia, the pus or muco-pus of which gives no results by inoculation, furnishes

none in its turn when it suppurates; whilst the bubo, by absorption of the chancres, furnishes like the other an inoculable pus, we shall see a notable difference. If on the other hand, that of the secondary symptoms of lues, chancre is the most common and constant precursor, and that blenorrhagic symptoms are rarely followed by constitutional disease, we will find an easy explanation and reason for maintaining opinions apparently discrepant, and yet in fact similar. The truth might be thus expressed: the primary symptoms of lues is chancre, the form and character of which cannot be the same in all the tissues, and which concealed in the mucous membrane, may either simulate a blenorrhagia, or be masked by it. Without a urethral chancre in blenorrhagia, secondary symptoms are impossible. The rarity of chancre in the urethra during a blenorrhagia, because the necessary predisposing causes are rarely found, explains the relative rarity of the true virulent blenorrhagia of authors, or what I call *chancre larvé*, compared with the numerous cases of mild blenorrhagia, and agrees with the observations of all good authors." "These," continues M. Ricord, as quoted by the report, "are propositions of great importance, which have arisen from close observation, and capable undoubtedly of great qualification, but which I have reduced in volume in order not to waste the time of the Academy."

The objections arrayed against his propositions are summed up by M. Ricord thus:

"Urethral chancres are rare. M. Lagneau has seen *mild* and *catarrhal* blenorrhagia followed by all the symptoms of constitutional syphilis. M. Lagneau says that coryza, conjunctivitis, and discharges from the rectum may be syphilitic without the existence of ulcerations, and may be followed by symptoms of constitutional lues, or propagate syphilis. He adds, that when I assert that the pus of chancre may produce non-virulent blenorrhagic discharges like other irritants, it is impossible for me to prove the assertion. To conclude; the last objections are urged against the uncertainty and dangers of inoculation."

These objections are well disposed of in a few words, by M. Ricord, who concludes his answer with his well known propositions, which unless more successfully controverted than they have yet appeared to be in the midst of protracted opposition, certainly "will add some positive results to a branch of knowledge which has hitherto been enveloped in the most absurd and ridiculous mystery." (vide p. 153.)

They are stated as follows:

"I. The syphilitic ulceration, at the specific period, produces an irritant pus, which, by inoculation, gives rise to a characteristic pustule followed by an ulcer identical with the former, and so on.

"II. Whatever may be the apparent qualities of the pus furnished by

an inflamed surface, without regard to the stage or degree of inflammation, if there is no *specific* ulcer, the inoculation is nugatory and unproductive.

"III. No ulcer of not well-proved syphilitic origin, or no artificial ulcer simulating syphilis, can furnish inoculable pus.

"IV. There is not a single symptom of primary syphilitic ulcer which may not be found in ulcers without a trace of syphilis, or which may not be artificially produced; the most perfect assemblage of symptoms, belonging to the true Hunterian chancre, furnishing merely a rational diagnosis. The only absolute, unequivocal and pathognomonic sign, which natu r or art cannot imitate, is the character of the secretion demonstrated by the results of inoculation.

"No one more than myself, has shown the inconveniences and dangers of inoculation, when I proved, contrary to many authors, that the pus of chancre, not only necessarily reproduces chancres, but likewise an ulcer identical with the former. If the inoculation is performed on the same person, the varieties of chancre depend on individual condition, and not on a variety in the specific cause, which is always the same.

"I have also proved the danger of inoculation with pus, reputed non-malignant, such as that of buboes, as was first asserted by M. Cullerier, who has since entirely yielded to my opinion.

"Whilst exhibiting all the cases to the numerous pupils attending my clinic, and publishing, consequently, all my researches, I have never concealed the dangers which might arise from the indiscriminate use of inoculation, but I have shown the advantages that practice and science might reasonably hope to derive therefrom.

"Inoculation performed with proper precaution, is now one of the most innocent operations, because we can promptly arrest its effects after having obtained the information desired. Cauterization with Vienna paste, on the fifth day, at which period, all the characters of the pustule and ulcer are sufficiently developed, always succeeds; and frequently the eschar, which results, leaves in falling off, the subjacent tissues already healed; or if it falls off at an earlier state, there remains only a simple wound which cicatrizes rapidly."

We have given this summary in full because of its importance, although the doctrine it contains has long been a familiar thing; and because that doctrine has continued to gain ground and strength from year to year, and has become as little a matter of conjecture and crude experiment, as it is one of novelty.

Want of time and space will oblige us to pass rapidly over the remainder of the volume. We shall refer as briefly as we can to a few of the cases which may suggest some practical remarks.

To go back a little, we may select case 8d, p. 126, (see fig. 4th of plate 6th,) as presenting some points of particular interest, at the same time, that it is a pretty fair specimen of the clinical reporting of the book in general.

"*Pic—23 years of age, by trade a gilder, admitted October 8th*, 1839. From this patient's account, he has long been subject to herpes preputialis, frequently occurring, but generally disappearing without treatment, after a duration of seven or eight days. The disease under which he now labors has existed for three weeks, and was observed three days after sexual connection. The first symptom he perceived was an ulcer on the internal surface of the prepuce, and which now is in the stage of reparation. This was soon followed by other ulcerations, and follicular inoculation.

"At this date, the glans is red, slightly swollen, and presenting on its surface several eczematous vesicles. On the corona glandis and the mucous membrance of the prepuce are numerous follicular ulcers resembling, for the most part, apthæ. The earliest of the ulcers, also the most extensive, has reached the state of reparation, and appears evidently due to the junction of several groups of ulcers. Its roseate base, already projecting beyond the adjacent parts, thus constitute one of the varieties of ulcers designated by the term *ulcus elevatum*. The edges of some of the chancres in the progressive stage are perpendicular, and their gray base formed by an adherent coat. Others still in the incipient stage, having the vesiculo-pustular form, resemble so exactly the eczematous vesicles on the glans that an examination of their apparent characteristics scarcely marks the difference between them.

"In this patient a recollection of the order in which the symptoms appeared, prove to us that the virulent pus furnished by the first ulceration, has become the cause of two very distinct phenomena; on the one hand, by the infection of the follicles in the vicinity of the corona glandis, it has given rise to follicular chancres; and on the other, by its acridity as an irritating substance, it has favored the developement of the eczematous eruption on the glans.

"The thigh of the patient was inoculated with pus from one of the vesicles on the glans, as well as with pus taken from one of the eczematous vesicles developed on the surface of the balanitic mucous membrane.

"The chancres were cauterized with nitrate of silver and dressed with charpie soaked in aromatic wine. The eczema of the glans was treated by a solution of nitrate of silver, (1 part in 250 of distilled water.) Half diet.

12th. "The inoculation with the pus from the corona glandis has produced the pustule characteristic of the primary ulcer; it was torn open, and beneath the skin was found throughout clearly divided by an ulcer with perpendicular sides and grayish base. The inoculation with the pus from the vesicle of the eczema has produced no result, and the distinction between the symptoms, so difficult on mere inspection, has thus been rendered certain by the artificial inoculation. Three-fourths diet.

"29th. The use of the nitrate of silver and aromatic wine has much improved the aspect of the chancres on the corona glandis. The ulcer in the state of reparation of which the base was projecting, has become level with the surrounding parts; and the grayish coat, formed on the chancres in the progressive stage has nearly disappeared. Cleanliness

and the lotion of nitrate of silver will remove the eczematous vesicle from the balanitic mucous membrane. Continue the dressings and regimen.

"Nov. 6th. The ulcers are every where in the stage of reparation. They are superficially touched with nitrate of silver. The dressings and regimen are continued; and on the 15th, he was discharged well."

Plate 8th, exhibits a very graphic illustration of a bad case of primary ulcers, acute balano-posthitis, phimosis and gangrene. The practical, point an account of which we quote from its history, is the failure of inoculation, which, in the words of the writer, "proves to a certainty that the gangrene has radically modified the specific nature of the primary ulcers. It is also important to observe," continues he, "that the pus mixed with gangrenous detritus, the contact of which had produced an erythema of the parts adjacent, did not furnish on inoculation, the smallest symptom which it was possible to confound with those resulting from inoculation with the pus containing syphilitic virus, an agent indispensable in developing the regular phenomena always produced by its introduction under the epidermis, and which cannot be simulated by the more or less acrid secretions furnished by the genital organs, whatever may be the degree of inflammation of the ulcers seated on them."

Plate 10th, affords an additional illustration of gangrenous primary ulcer, and of the non-inoculating property of its purulent secretion. Extreme tension of the tissues in this case, and threatened extension of the gangrene, rendered it important to remove the phimosis by an operation, which, as M. Ricord remarks, should be resorted to "as rarely as possible during the existence of chancres in the progressive stage, for the virulent pus does not fail to inoculate the edges of the incision, and thus extend the ulceration." The operation was performed, however, as a matter of necessity, and in the hope that the specific character of the primary ulcers whose existence was suspected, had been modified by the gangrene, which had mixed its detritus with the secreted pus. It afterwards appeared that the lips of the incision did not ulcerate, "thus verifying the prognosis given as to the destruction of the virulent principle by gangrene. Nevertheless, in order to establish incontestably this point, some pus from the primary ulcer was inserted into the left thigh, and the right

thigh was inoculated with pus taken from the superior angle of the division of the prepuce." These inoculations produced no effect.

On plate 21st, we find a specimen of virulent primary ulcer of the gum, contracted by the application of the mouth to the genital organs of a woman affected with chancre.

This is the only case ever met with by M. Ricord, although he tells us that he has several times seen chancres of the lips and tongue. His "object in adducing this example, was to prove that the inoculable virulent syphilitic pus does not select any particular organ, and that it always acts locally, wherever the conditions necessary for its development are found." "Moreover, as a proof that the severity of syphilis does not depend, as has been said, on the location of the primary disease," we are informed, "that this patient had no constitutional symptoms, for he remained healthy long after the period [within six months, if no mercury has been taken or employed,] at which they should have occurred."

The plate (No. 24) and cases to which we next refer, introduce us to "one of the most difficult problems of syphilitic pathology." The transmission of syphilis from the child to the nurse, and *vice versa*. The two cases are respectively that of a nurse and child, both affected with secondary symptoms, and the nurse also with primary—the child having had a syphilitic father; and that of a child of a healthy mother and healthy *husband*, but of whom the *real father* was secondarily diseased. They show the difficulty, easily imagined, of getting at the truth, so far as parents and nurses are concerned to conceal and misrepresent it.

In regard to contagion from secondary affections, M. Ricord says that he has frequently met with cases favorable to this belief. But whenever he has seen the infant and nurse in the commencement, which often occurs, he has been always able to distinguish the coincidence of secondary symptoms from true contagion produced by the contact of inoculable primary disease (or chancre.)

In relation to the important question of the transmission of syphilis from the parent to the child, he advances the following propositions, based upon a large number of cases.

"I. The father and mother may transmit the disease to their child indifferently, if either or both of them be affected.

II. Transmission may occur from the parents to the child, when they are affected with constitutional symptoms, or when a concealed syphilitic diathesis exists in them.

III. The absence or existence of constitutional symptoms in parents, at the moment of impregnation and conception, exerts no influence on the form of the disease which may afterward appear in the child. The distinction established by M. Cazenave between congenital and hereditary syphilis, and which is based on the absence or presence of constitutional symptoms in the parents at the moment of generation, or which have been developed in the mother during gestation, is totally erroneous; and, indeed, M. Cazenave confesses that his opportunities of observing it have not been ample.

IV. The character and period of the manifestation of the symptoms in the child are governed by the stages to which the disease had advanced in the parents at the moment of generation. The treatment to which the parents were subjected, may also retard, prevent, or modify the appearances in the child.

V. If the parents are both healthy at the time of generation, and the mother contracts syphilis during gestation, she may transmit the disease to her child. Of this I have seen several examples, at various periods of pregnancy, even to the seventh month inclusive.

VI. When the venereal poison is transmitted from the mother to the child during pregnancy, infection takes place through the medium of the placenta, and, in this case, appears to occur after the fourth month of utero-gestation.

In abortions which are consequent on syphilis, if the father alone be diseased at the moment of generation, the abortion may occur at any period of pregnancy. If the mother alone be diseased at the time of conception, the abortion will not take place until after the fourth month.

VII. Children born of a father or mother affected with syphilis may escape infection; for a certain disposition to receive constitutional disease is necessary for the child as well as the adults, and this may be absent.

VIII. Observations made as accurately as possible, seem to prove that constitutional syphilis may be trasmitted from the child to the mother during utero-gestation."

In connection with this subject, we may cite a case of bad tertiary affection of the throat, (see p. 278,) shown in fig. 3d, plate 30th. "Notwithstanding the doubts which may exist concerning paternity, in spite of the legal precept '*Pater est ille quem nuptiæ demonstrant*,' I think it important here," says our author, "to point out what, in this case, bears on the question of transmission on the part of the father, and which relates to what may be observed in a more rigorous manner, when discussing transmission by inheritance from the mother to the child. Experience teaches

us that in the stage of tertiary symptoms, parents may give birth to children presenting no trace of syphilis."

"At the time of his marriage in 1845, M. C—— had no syphilitic symptom, and in thirteen months his wife was delivered of a perfectly healthy child. This child still remains well;—nevertheless, M. C—— was under the influence of a syphilitic diathesis, for the first deep ulceration of the throat appeared fifteen months after his wife's first accouchement, and, a remarkable circumstance, eleven months before the last recurrence of the tertiary ulcers in his throat, he had a second child, like the first perfectly healthy. Madame C—— has always enjoyed good health."

With these quotations, we are reluctantly obliged to close. We would be glad to avail ourselves of many others of the cases, and the plates accompanying them, for the purpose of calling the attention of our readers to the various matters of doctrine and experience they may bear upon, but must content ourselves with with earnestly recommending the study of the whole work, as the very best assistant in the diagnosis and management of venereal diseases that has yet been published in this country. Of course it does not supersede the systematic and more elementary works, especially those of M. Ricord himself, and we may add of his able English advocate and coadjutor, Mr. Acton. It constitutes what it alone pretends to be, a splendid clinical illustration of the general facts as they are described in the more didactic essays; and as such it must prove in its American dress a most valuable practical companion and adviser to the advanced students and practitioners of this country. The only evidence of want of care in the preparation of the plates, is the almost continual negligence displayed in the numbering of many of the separate figures as well as of nearly all of the plates themselves. This oversight of the lithographer, however, does not appear to have led to any confusion in the binding, and is therefore not so much to be deplored. Still it is embarrassing to readers, and may become a source of trouble in the binding, and we trust that an early opportunity will be taken to remove the difficulty in the later copies, which will doubtless soon be wanted.

Lectures on the Eruptive Fevers. By GEORGE GREGORY, M. D., Fellow of the Royal College of Physicians of London; Physician to the Small Pox and Vaccination Hospital at Highgate. *First American Edition, with notes and an Appendix, by* H. D. BULKLEY, M. D., Physician of the New York Hospital. New York. S. S. & W. Wood, 1851.

This book comprises a course of lectures on the Eruptive Fevers, delivered by Dr. Gregory in 1843 at St. Thomas's Hospital, London, and annually repeated since that time. It is a very complete manual on the subject, distinguished by great learning and research, an extremely agreeable and lucid style, and, we think, very sound pathological and therapeutic views. The additions of Dr. Bulkley are extensive, and his running comments and appendix greatly enhance the value of the work.

Dr. Gregory makes four grand divisions of cutaneous affections. I. The acute febrile affections bringing life into hazard, which he terms the greater exanthemata, viz.:—Small Pox, Measles, Scarlet Fever, and Erysipelas. II. The acute febrile affections not bringing life into hazard—the lesser exanthemata, which he subdivides into two sections. 1. Vesicular affections, Vaccinia, Varicella, Herpes, and Miliaria; and 2. The simple efflorescences, not leading to fluid effusion, Lichen, Urticaria, Roseola, and Erythema. III. The chronic cutaneous affections of a mild or benignant character, Lepra, Psoriasis, Ichthyosis, Impetigo, Elephantiasis, and Moluscum. IV. Chronic cutaneous affections of a malignant character, such as Cancer, Lupus, and Fungus hæmatodes. The two last divisions, the chronic cutaneous diseases, are not treated of.

The subject of small pox occupies a principal share of the author's attention; and he devotes considerable space to the very interesting and important questions—the identity of small pox and cow pox, and the prophylactic value of vaccination. The conclusions presented in connexion with these points—particularly the latter—will arrest general attention. Dr. Gregory proclaims a distrust in the permanent efficacy of vaccination as a preventive of small pox, which we certainly were not prepared for; and his advocacy of a partial return to inoculation cannot

but be received as a remarkable and even startling suggestion.

The identity of small pox and cow pox, is a subject not merely of speculative interest, but of a near practical bearing upon the protective value of vaccination. Jenner was sensibly alive to this; and always strongly advocated the opinion that the two diseases were only modifications of each other. He even advanced the idea that cow pox was the original or parental form, which had been converted by time and modifying circumstances into the more malignant variety, small pox.

This theory is rejected in toto by Dr. Gregory, who maintains that the two affections, instead of being identical or analogous, are antagonistic; and that cow pox, far from being of a variolous, is in fact, of an anti-variolous nature—admitting always, however, that "it alters and modifies the human constitution so as to render some individuals wholly, others partially, and, for a time, unsusceptible of small pox." The discussion of this question is so closely mixed, as we have observed, with the subject of vaccination, that, in the absence of any positively determining facts, opinions are formed with reference to it, according to the views entertained of the efficacy of the agent. The advocates of the theory of entire *identity* frankly admit that a "conviction of the non-identity of the two diseases, would go far to shake, in toto, their belief in the real efficacy of vaccination."

The experiments of Mr. Ceely and others have certainly settled the question, that the inoculation of the matter of small-pox, into the teat or vaginal membrane of the cow, produces the secretion of a fluid identical with that of ordinary cow pox, which, when inserted into the human subject, is followed by a regular vaccine vesicle. This fact has strengthened the belief in the identity of the two affections. But it is met by Dr. Gregory with the argument, that other poisons than the variolous poison develop the vaccinia in the vessels of the cow—as matter from the heals of the horse, when laboring under a disease termed the *grease*. And he infers that "the variolous as well as the equine miasm is converted by the constitution of the cow into the vaccine miasm, in the same way as the vaccine fluid is secreted under several forms of feverish excitement." If the experiment of Ceely proves any thing, it is that small pox is the primary,

and cow pox the secondary disorder, and not, as Jenner thought, that cow pox is the parent of small pox. Moreover the non-identity of the two diseases is urged from the fact that they may co-exist in the human subject, progressing side by side to maturity, without the slightest disposition to coalesce or hybridize. And we confess that there appears to us to be very great weight in this objection.

Dr. Gregory's opinions as to the gradual exhaustion of the vaccine protection are strikingly in contrast with the absolute feeling of security, which prevailed on the subject, within the recollection of most of our readers. The protective power of cow pox he thinks *complete*, or nearly so, in childhood, say up to the age of eight years. But puberty and other disturbing causes, as change of climate or severe fevers, notably diminish the vaccine energy, leaving, however, a "portion of virtue still clinging about the system sufficient to preserve life, though not to exhaust susceptibility." The results of his statistical investigations on the subject, amount to this: that small pox, in the unvaccinated, is only five times more fatal, than in those who have previously undergone vaccination. And this announcement is followed by expressions of almost unqualified disbelief in the restorative efficacy of REVACCINATION. It is, indeed, recommended. But we are told, that in the larger number of instances, it will be followed by scarcely appreciable benefit, while it sometimes "occasions considerable local distress, and some amount of constitutional disturbance." That, with these opinions, our author turns to inoculation, as at least an occasional resource, is not surprising.

"The imperfect aid afforded by revaccination suggests the question whether, in adult inoculation (between the ages of twelve and twenty,) we might not find a better mode of testing and improving the security of the vaccinated. Small pox, taken casually after vaccination, proves fatal, as we have seen, at the rate of seven per cent. Inoculated small pox proved fatal, in former times, at the rate of only one fifth per cent., or one in five hundred. As regards the extension of small pox from the practice of inoculation, no real danger need be apprehended. The experience of ten years in England has amply demonstrated that the diffusion of small pox is wholly independent of such artificial propagation. Small pox has been as general in England since inoculation was abolished as it was previously. But it is as yet little known, that small pox may be received into and pass through the system without producing either fever or eruption. I inoculated three of my own children at the respective

ages of twelve, thirteen, and fourteen, after successful vaccination in infancy, and the result was as follows:—In two, local affection without fever or eruption. In the third case, local affection without fever, but with papular eruption on the seventh day, not advancing to vesicles. I firmly believe that these children are now, and will remain through life, unsusceptible of small pox. The advantages derived from such a course of procedure are these:—If the child's constitution be under the full vaccine influence, no effect will follow. If the vaccine influence be subsiding or altogether lost, then the small pox will be taken at the period of life (puberty) most favorable for safety, instead of being received (as too often happens under the present system) under circumstances the most unfavorable,—for instance, by mothers at the period of parturition, by young women on the eve of marriage, or by young men at a distance from their friends. The state of the law in England prohibits the practice here; but I hope it will be tried in other countries, where the judgments of medical men are less fettered."

The American editor has met these views with a very able argument in favor of re-vaccination, which we extract at length.

"We feel that the propriety, if not the duty, of revaccination is now so generally acknowledged as to perhaps render it unnecessary for us to adduce evidence in favor of the practice. But as the views of some on the subject may not be so fully established, and as others may feel interested in an examination of the evidence by which it is supported, we have concluded to devote a short space to it.

Some of the earliest, and at the same time most conclusive testimony in its favor, is furnished by its results in the Wirtemberg, Hanoverian, Bavarian, and especially the Prussian armies. Our limits will not permit us even to give a summary of the figures on which the results are founded, and we can only transfer to our pages some of their most striking features and items.

Revaccination was first commenced systematically in the Prussian armies in the year 1833, after having been practised in the Wirtemberg army and among smaller bodies of men for several years previously, and recommended by several leading practitioners, and has been continued in that and in several other armies, and also among large bodies of civilians, from that time to the present. The following are among the results:

In Wirtemberg but one case of variola occurred in five years among 14,384 revaccinated soldiers, and three only among 26,864 revaccinated civilians.

Not a single case of small pox occurred among those who had been revaccinated in the Prussian army in 1836, 1837, or 1839. But three deaths by this disease occurred in all the military hospitals of Prussia in 1841, and of these, one was in a person not vaccinated on entering the army, because it had been done shortly before; a second in a recruit who had not been revaccinated; and the third is an officer

who had been revaccinated some years before, but without success. In 1834, two deaths are recorded of those who had been revaccinated with effect in the Prussian army, and one in 1843. In 1849, but one case was fatal, and this was in a recruit, vaccinated when a child, and who had not yet been revaccinated.

During an epidemic of small pox in Copenhagen in 1828 to 1330, and also a very severe one in 1832, and another in 1835, not a single instance of variolous or varioloid disease was observed among any who had been revaccinated.

In the Danish army, of those who were successfully revaccinated in 1838, not one was attacked with small pox.

In an epidemic of variola at Heidelburgh in 1843 and 1844, described by Dr. Hœffle, of all those attacked, not a single one had been previously revaccinated, while the vaccinations most successfully made did not protect from the most severe varioloid those older than ten years.

M. Lombard stated, during a late discussion at the Belgian Academy of Medicine, that in the dreadful epidemic of variola which has just desolated Liege, none of those who underwent revaccination took the disease. (*Brit. and For. Med. Chir. Rev. Jan.* 1851.)

Steinbrenner, as the result of extensive investigation of the subject, says, "revaccination is the indispensable complement of the first vaccination, not that it is always necessary, as some pretend who admit the loss of its protective power by time, but because it is necessary in very many cases, and because there is no other means of distinguishing such urgent cases from those in which revaccination is unnecessary." (*Traité sur la Vaccine*, p. 684.) He derives his arguments in favor of revaccination from its effects in the different European armies to which we have already alluded, as well as when performed by various individuals on a smaller scale, of which he presents a long array, and says that, in the absence of every other argument, these results are strongly in its favor, because it is impossible that the process should be so often successful unless the success depended upon a predisposition which exposed the individuals to variola. He also demonstrates the necessity of general revaccination by consideration derived from the too great frequency of vaccinations which are not all protective, or only imperfectly so.

M. Bousquet says, after giving a long list of instances of protection by revaccination without a failure, even in the midst of epidemics, a list of which, he says, he could easily extend, "there has not been an epidemic which has not proved, at the same time, the virtues both of vaccination and of revaccination." (*Nouveau Traité de la Vaccine*—Paris, 1848, p. 506.) He also says (p. 501), "the success of revaccination is at the same time the effect and the proof of the wants of the system"—when it succeeds, it not only proves that the protective power of vaccination is diminished, but it supplies a remedy for this diminution."

The following are the conclusions on this subject of the Committee on Vaccination, of the French Academy, as contained in their report to that body, in February, 1845:—

1. Small pox rarely attacks those who have been vaccinated before the age of ten or twelve, from which age, until thirty or thirty-five, they are particularly liable to small pox.

2. Revaccination is the only known method of distinguishing those vaccinated persons that remain protected, from those that do not.

3. The success of revaccination is not a certain proof that the person in whom it succeeds was liable to contract small pox; it merely establishes a tolerably strong presumption that he was more or less liable to take it.

4. In ordinary periods, revaccination should be practised after fourteen years, but sooner during an epidemic.

Among the conclusions of a report on the subject of vaccination, lately made by a Committee to the Belgian Academy of Medicine, are the following:—

"As the immunity conferred by vaccination is not indefinitely absolute, revaccination, at least for a greater number of individuals, is rationally indicated.

"Experience has proved that a recent revaccination preserves from variola, and varioloid, and that, practised on a sufficient scale, conjointly with vaccination, it constitutes a sure means of arresting the progress of this malady when it appears epidemically.

"It succeeds best in proportion as it is most required, that is the more remote the period since the individual has had variola, or has been vaccinated.

"During the prevalence of an epidemic of variola or varioloid, it is prudent to revaccinate all of those whose first vaccination dates ten years back, and all of those whose first vaccination gives rise to any doubt. (*Brit. and For. Med. Chir. Rev.*, Jan. 1851—from *Gaz. Méd.*)

Tommasini was led by his observations of its results during an epidemic of variola in Italy, to recommend it to his fellow-countrymen, and we might add the names of many highly distinguished of our profession and on both sides of the Atlantic, who concur fully in the importance of the practice, and some who even think it criminal to neglect it.

We cannot but feel, therefore, in view of these facts, that the testimony in favor of re-vaccination is too strong to admit of its neglect. If no other argument could be adduced, the fact that it immediately *arrests the course of epidemics* when they appear, and that its faithful performance has almost entirely banished small pox from some armies in which it had formerly committed great ravages, would seem conclusive in its favor.

It may perhaps be said the results in the European armies to which we have referred speak against the manner in which primary vaccination was performed in these cases, and can hardly, with justice, be advanced in proof of what would have occurred, had the process been

perfect in every respect. But allowing this to be true, they may still be adduced as a warning of the danger to which our own population is at least partially exposed; for it cannot but be true, that the process has been not unfrequently performed among us in such a way as to diminish, if not entirely destroy, its protective power. Hence, we need revaccination as a test of security, and as the only one within our reach. And when we consider the almost perfect protection, thus far at least, afforded by revaccination, and how trifling is the operation, we can surely hardly entertain for a moment the idea of resorting to variolous inoculation, either as a test, or for additional security against the failures of vaccination—an operation which is at least occasionally fatal, which subjects those upon whom it is performed to some of the serious results which follow in the train of variola itself, and which cannot be practised without multiplying centres of contagion, and thus aiding the ravages of the very enemy it is intended to combat.

It is proper, however, to state, that the value of this practice is doubted by some, and even its propriety questioned.

Occasional instances of an attack of varioloid after re-vaccination doubtless do occur; but they are so rare as to be thought worthy of record when a single one occurs. Bousquet gives the case of an infant. M. Newman also gives a case, after revaccination by himself. (*Prov. Med. and Surg. Jour.* May 1, 1850.) He considers the practice as a test of the efficacy of the first vaccination, and not a renewal of its influence, which, he contends, can never take place. The occurrence of a regular vaccine vesicle after revaccination he regards as a proof that the individual had not previously been successfully vaccinated.

It is true, as our author remarks, that a talented commission, appointed for the purpose in Paris, reported against the practice of revacccination; but it is equally true that another commission (the one whose conclusions we have quoted), appointed for the same purpose, at a later date, reported in its favor.

As to the age at which its practice should be advised, that of about ten or twelve years, is the one most generally recommended, advice founded on the time at which cases of varioloid have been found to commence occurring—the proportion of cases under ten years of age being very small.

Steinbrenner fixes upon the period of twelve to fifteen years of age as the one most proper for revaccination, and says that, if performed at that time, it will protect for life from variola.

Bousquet says that there is danger from variola from the age of ten or twelve to thirty or thirty-five years, and that the time for revaccination commences from the age of ten or twelve years, that its value increases at fifteen years, and is never greater than between twenty and thirty. In times of epidemic prevalence, it should be practised earlier.

In general terms, it may be said, that the prevalence of variola, the exposure of an individual at particular times, and anxiety felt on the subject at any time, may each afford a reason for performing an operation so trifling in its nature, and attended usually with so little inconvenience,

that it had better be submitted to more than once unnecessarily, than neglected, when it might have preserved from an attack of a loathsome disease, and perhaps even saved life itself.

We need hardly add, that even greater care should be taken with the second and subsequent vaccinations than with the first, as we have not the same test of its success as in that case. It should therefore be a rule of practice to repeat the revaccination, if not successful the first time, and even to repeat it several times, in such a case; as a failure to produce the disease might happen from some imperfection in the process, as sometimes occurs in the primary vaccination."

THE MEDICAL EXAMINER.

PHILADELPHIA, JULY, 1851.

In the account of the late proceedings of the American Medical Association, published in our June number, the attention of our readers was perhaps directed to some remarkable circumstances connected with the presentation of the report of the Committee on Obstetrics. After this report had been read by the chairman, Dr. Storer, of Boston, the accuracy of certain statistical facts, embodied in it, was called in question by Dr. Robertson, of South Carolina. These facts had been extracted from a paper by Dr. H. A. Ramsey, of Lincoln county, Georgia, published in the last October number of this journal. Dr. Robertson moved "that the statistics, alluded to in the report, be stricken out, as the author of them was not a reliable man." And it appears that this motion, in substance, prevailed, and that "Dr. Storer erased the statistics referred to."

We confess that these proceedings struck us as somewhat extraordinary. We have no personal knowledge of either of the gentlemen named, and we write in the dark as to the under-current of feeling which may have prevailed on the occasion. But, forming our judgment from the record, we cannot but dissent from the decision which was made. Whatever the merits of the case, the ordinary forms of justice were disregarded in the condemnation of an unheard, absent person; and there appears to us to have been in every way a want of

propriety in the time, the place, and the tribunal, which were selected for the trial of this question of credibility. The affair seems to have been very much a 'snap judgment.'

We have received from Dr. Ramsey a letter on the subject, in which he indignantly repels the assault upon his veracity. He has forwarded to us a number of testimonials as to his reliability and integrity, from his professional brethren and others of his neighborhood. And he also states, that he has invited Dr. Robertson to substantiate his charge before a board of professional referees, in whose decision he will entirely acquiesce.

We have felt it due to our correspondent to allow him to be heard in reply to this attack. Let us, however, add, that we take no part whatever in the personal controversy between the gentlemen in question, and that our remarks apply only to the manner in which it originated.

OBITUARY.

Died,—At Philadelphia, June 24th, Dr. Spencer Sergeant, second son of the *Hon. John Sergeant.* Dr. Sergeant was lately one of the resident physicians at the Pennsylvania Hospital, where his quiet and faithful discharge of his duties, as well as his amiable and gentlemanly deportment, endeared him to all connected with that institution. Although young in years, he had given bright promise of eminence and usefulness. Many of our readers will remember the able reports that emanated from his pen during his official connection with the Hospital, a large proportion of which, with his judicious practical remarks upon them, were extensively copied both at home and abroad. To his many friends, as well as to the profession, his early death will cause a void not easily to be filled.

MEDICAL NEWS.

Dr. Thos. Stewardson, formerly of this city, has received the appointment of Professor of Natural Sciences in the Georgia Military Institute, situated at Marietta. Dr. Stewardson's early devotion to these sciences, especially Botany, of which his knowledge is extensive, highly qualifies him for such a position. At one time when a resident in this, his native city, his zeal in behalf of Natural History induced him to perform the duties of secretary of the Academy of Natural Sciences, from which his public and private

engagements only forced him to return. As a citizen of another state, where health induced him to take up his abode some years since, his learning and acquirements have been appreciated, and we rejoice in the tribute to merit which is evinced by this appointment.

New-York Medical College.—Dr. J. M. Carnochan has been appointed professor of Surgery, in place of Dr. A. L. Cox, resigned; and Dr. Edmund R. Peaslee, of Dartmouth College, Professor of Physiology, Pathology, and Microscopy.

Buffalo Medical College. Some changes have recently taken place in the organization of this Institution. Prof. B. R. Palmer, of Woodstock, Vt., has been appointed to the chair of Anatomy, vacated by the resignation of Prof. Webster, announced in a former number of this Journal.

Prof. C. B. Coventry, having tendered his resignation, has been appointed "in consideration of his services in behalf of the College, and as a token of the high respect in which he is held by the Council and Medical Faculty," Emeritus Professor of Physiology and Medical Jurisprudence. Dr. John C. Dalton, jr., of Boston, Mass., has been appointed to the chair of Physiology and Medical Jurisprudence, vacated by the resignation of Prof. Coventry.

Mesmerism. It may be in the recollection of our readers that Sir Philip Crampton, some time since, in order test the powers alleged to be possessed by persons in what is called the clairvoyant state, produced by the mysterious influence of mesmerism, offered to enclose a bank note for £100, in a sealed envelope, which should become the property of any individual who could, while blindfolded and in the mesmeric sleep, tell its date and number. The challenge has been accepted by Mr. Hill H. Hardy.

Early Struggles of Leuret.—M. Leuret, late physician to the Bicêtre, at Paris, whose premature death was recorded in the April number of the Examiner, was a remarkable example of self-denial and perseverance in working his way to professional rank and fame. His father was a baker, and refused to furnish his son with the means of prosecuting his studies beyond the first year. Poor Leuret was compelled to enter the army as a common soldier. After four years' service, chance so far favored him that his regiment was quartered at St. Denis. His officers

were kind and exempted him from mounting guard. The whole of the French army at this period was clothed in white, and the pupils at Salpêtrière have never forgotten the puny little soldier in white uniform, but bespattered from head to foot, who walked every day for years, over the muddy causeway of St Denis, to attend the lectures of Esquirol. The privations which he then endured engendered the disease that cut him off at a later period. He used to sell his bread to buy a candle, wherewith to study during the night in the corner of the barrack, and continued this career with unshaken perseverance, until Esquirol, a man as good as he was great, came to his aid by obtaining his discharge, and appointing him to a place in Salpêtrière.

New Mode of Taking Fees.—The Editor of the *Union Medicale*, in an article on medical organization, mentions the following curious manner of taking fees:—A physician who lived in one of the most populous faubourgs of Paris, and who had an enormous practice, never took any fees at all; but twice a year his wife made a circuit among all her husband's patients with a large bag, which she presented to each, saying, "Put in as much as you like, or as much as you can." The physician in question left a considerable fortune as the result of this confiding practice. Another physician is mentioned, who fatigued two horses daily, and whose fee for every one was only one frank (tenpence) a visit. It is to such conduct as this, when two or three men undersell all their professional brethren, that M. Latour in part attributes the depressed condition of the Profession in France.

M. Cazeaux has been elected a member of the French Academy of Medicine, in the Section of Midwifery.

Death of Dr. Bougon.—Letters from Venice, mention the death of Dr. Bougon, the medical attendant of the family of the Duc de Bordeaux. It will be remembered, that at the time of the assassination of the Duc de Berri by Louval, Dr. Bougon was the first medical man who went to his assistance, and immediately sucked the wound, under the impression that the weapon was poisoned. Dr. Bougon, in 1830, followed the royal family of the elder branch of the Capets into exile, and remained with them till his decease. Such an example of truth and fidelity is indeed honorable to the Profession and to mankind. Would to Heaven the instances were more numerous.

Lord Langdale, who recently died in England, where he was long Master of the Rolls, was originally educated for the medical profession.

Medical Prescriptions.—Amongst the many notable schemes which the reform mania of the present day has propounded, is that of compelling physicians to indite their prescriptions in English. Petitions are in fact in the course of signature for this very purpose, if we may believe the newspapers. What the motive may be for this meddling with the usages of the profession we cannot conceive, unless it be the impression that a degree of safety is attainable in dispensing from a prescription in vernacular, which is not so from the Latin. Whatever it be, it will be a matter of little moment, as we do not believe that the legislature will interfere in a proceeding which has always worked well; but it is of importance as an evidence of the tendency on the part of the public to meddle with the medical profession, without the least reference to their welfare or convenience.—*Prov. Med. and Surg. Journ.*

Medical Department of the St. Louis University.—Dr. McPheeters has been transferred to the chair of Materia Medica and Therapeutics in this institution, made vacant by the resignation of Dr. Reyburn; Dr. Willis G. Edwards to the chair of Clinical Medicine and Pathological Anatomy; and Dr. Chas. W. Stevens elected to the chair of General and Descriptive Anatomy.

Obituary. Died recently, at Kensington, London, Henry Smith, Esq., surgeon, late of Torrington-square. Mr. Smith combined, with the highest practical attainments, an earnest love for physiological pursuits, and was a zealous co-operator with Dr. Marshall Hall in some of his earliest investigations.

Professor Kölliker. This distinguished histologist last autumn paid a scientific and recreative visit to Holland and Great Britain, in company with Dr. Czermak. From time to time, he expressed his opinions of what he saw, with regard to the subject which he particularly studies, in four letters, dated respectively from Utrecht, Leyden, Edinburgh and London, and addressed to Dr. Von Siebold, his colleague in the editorship of the *Zeitschrift für wissenschaftlichen Zoologie.*

In Utrecht, he appears to have derived great pleasure from his examination of the labors of Harting, Schroeder van der Kolk, and Donders; and he concludes his first letter by observing, that

"Utrecht is a soil where science flourishes so vigorously, that no attempt should be made to transplant it without careful consideration." The letter from Leyden contains an account of his visit to that place and to Amsterdam.

From Holland, Drs. Kölliker and Czermak passed over to Edinburgh, and visited the Highlands, though, as the author says, not with much profit to science, especially as they had lost the opportunity of exploring the sea off the west coast in company with Forbes and Goodsir. On their return to Edinburgh, they spent ten days with Professor Goodsir, and visited the museums and schools of anatomy in that city. Of Professors Syme, Christison, and Simpson, Dr. Kölliker says:—"In the hospital, we less admired the safety than the ease and elegance with which Syme operates The first is found in Germany; but the latter are more rare . . . Christison does all credit to the great name which he has in Germany; he is highly estimable as a man, and is, perhaps, next to Simpson, the most popular physician in Edinburgh. Simpson is incontestably the first obstetrician in Great Britain; he cannot have many equals, and perhaps no superior." The experiments of Dr. Simpson on parturition in swine, after removal of a portion of the spinal cord, are referred to by Dr. Kölliker, who says that, as far as they go, they show that parturition is independent of the action of the cord. In returning from a visit to the Bass Rock, the travellers were reminded, at the village of Whitechapel, twenty miles from Edinburgh, of the state of the study of anatomy in Britain, about twenty years ago, by the ponderous masses of iron trellis-work which were used to protect the graves in the churchyard from the resurrectionists.

After a visit to Glasgow, Drs. Kölliker and Czermak proceeded to London; and Dr. K. speaks in terms of great satisfaction of the reception which he met with from Mr. Quekett, of the Royal College of Surgeons. His collection of microscopic objects he believes to be in no way inferior to Harting's in Holland, but even to surpass it. W. Bowman, Sharpey, Todd, Wharton Jones, Carpenter, Owen, and Paget, receive each a justly deserved tribute. With regard to the Hunterian Museum, Dr. Kölliker thinks that it ought to be made much more available for instruction than it is at present. "So large an institution," he says, "should also be a large school"

for anatomical instruction. The Regent's Park, Zoological Gardens, the British Museum, and the Museum of Economic Geology, were each visited; and the hippopotamus is honored with a brief notice.

Dr. Kölliker seems to have expressed his honest opinion of the state of anatomical knowledge in the places which he visited, and of the anatomists with whom he came in connection. British *savants* and practitioners may well feel gratified and encouraged by the tribute which he pays to their industry and knowledge.—*London Journ. of Med., May* 1851.

Illness of the Assistant Physicians at the Ward's Island Hospital.—We learn that five of the Assistants have recently suffered at this Institution with Typhus Fever—Drs. Ravenell, Emmett, Forbes, Blacknall, and Kerly. The first three have recovered, and are absent on sick leave. Dr. Blacknall has sufficiently convalesced to return to his duties, and the recovery of Dr. Kerly, (at present ill,) is confidently anticipated by his physicians.

Emigrant's Hospital, Ward's Island.—It is rumored that Drs. Hosack and Wilkes have resigned their places in the Medical Board of this Institution. We have not heard who are to be their successors.

Another Victim of Typhus Fever.—Dr. Ravenhill, another of the House Physicians at Bellevue, died at the Hospital a few days since, and was buried on Sunday last.

Concours—Election of M. Nelaton. M. Nelaton, one of the surgeons to St. Louis, was elected Professor of Surgery to the Faculty of Medicine on Wednesday last, and thus occupies the chair once filled with so much *éclât* by the illustrious Margolin. The election, it must be confessed, has occasioned universal surprise, for public opinion had selected another and more deserving candidate. The final decision was not arrived at without considerable hesitation,—one might almost say, without compromise of principle. It required no less than four different ballotings to arrive at a result. On the two first, the votes were thus distributed:—

For M. Michon, four votes, viz., Bouillaud, Larrey, and Hervez de Chegoin.

For M. Buisson, three, viz., Velpeau, Begin, and Reveillé Parise.
For M. Nelaton, three, viz., Rostan, Denonvilliers, and Langier.
For M. Robert, two, viz., Malgaigne, Gimella.*

On the third balloting, M. Robert's two voters went over to M. Nelaton; and, on the final *scrutin* between MM. Nelaton and Michon, the former was elected by a majority of seven to five votes.

The election, as I have said, has produced no small degree of surprise and regret, for the superiority of M. Buisson over all the other candidates was incontestable,—and it is seldom that the result of a Concours disappoints the judgment of the public. But, in the present case, it could hardly have been otherwise. M. Buisson was a stranger to the school of Paris, that is to say, pupil, representative, and professor of a rival institution; and his election would have been a virtual acknowldegement of the decadence of Parisian surgery. The schools of Paris and Montpelier have ever been opposed to each other, both in doctrine and educational practice, and *amour propre*,—a sentiment which influences even the most eminent men,—has, in the present instance, given rise to an act of manifest injustice. This opinion is entertained by the vast majority of those who assisted at the Concours, though many allege, in justification, that the judges could not have acted otherwise.

M. Nelaton, the new Professor, is a young man of very considable promise, and, although the Faculty may not have obtained the services of the best candidate, it will, at all events, be certain of possessing one fully competent to fulfil his duties. This is the main argument in favor of election by Concours. You are always sure of securing a man perfectly able to fill his office, though he may not be the *most* able,—a result which our British system often fails to produce.—*Paris correspondent of Med. Times, 24th May*, 1851

Kousso—Cod-Liver—Iodine. The recent importation of kousso into England appears to have a beneficial effect on our speculators here, who have reduced the price of the drug by one half. It is still extensively employed, notwithstanding its high price, and continues to sustain its reputation undiminished. Cod-liver oil, I regret to say, is not only excessively dear here, but of destestable quality. Any London house which would establish a depôt in Paris, would confer on

* The number of judges in a Concours is fifteen; but three have been compelled to retire from ill health, viz. MM. Roux, Cloquet, and Gerdy.

us a great benefit, and for itself secure handsome profit. Rancid oil fetches five or six shillings a pint, and at that price it is impossible to bring it into general use. M. Quesnville, the celebrated pharmaceutical chemist, is making strenuous efforts to substitute his amygdalaceous solution of iodine for the "genuine pure," but medical men cannot be induced to abandon one of our most efficacious remedies for a compound the therapeutic effects of which are not yet established.—*Ibid.*

Mistake Corrected.—The following correspondence, between a delegate elected from one of the colleges of New-York, and Dr. Hooker, chairman of the committee on Medical Education, of the American Medical Association, will sufficiently explain itself.

New-York, June 3, 1851.

Dr. Hooker:

Dear Sir,—In the New-York Medical Gazette of June 1st, it is stated that in your report before the American Medical Association held in Charleston, you "singled out the instance of a college in New York, whose delegate had a seat in the Association, and which had recently conferred a degree upon one of the most notorious and unprincipled Quacks in the whole country, and that, too, with a full knowledge of his past history and infamous character." A similar statement also appeared in the New-York Register of the same date.

If I am correctly informed, there were but two of the Medical Colleges of New-York represented in the Association.

As a delegate elected from one of these colleges, I would respectfully inquire of you *which* college was thus denounced, and *who* was the individual thus characterized?

I would respectfully submit, that justice demands an explicit answer, inasmuch as the charge bears an official character.

I remain, in haste, respectfully yours, B. Fordyce Barker.

Norwich, June 5, 1851.

Dr. Barker:

Dear Sir, Your note of the 3d instant was duly received, and I hasten to reply to it.

The statement to which you refer was *not* made in the report which I presented to the Association in Charleston. The committee indulged in *no such* personality as is *attributed* to them by the

Gazette and Register. When you come to see the report in print, you will find that rumor, as is too often the case, has committed a very *material misrepresentation.*

Yours respectfully, W. Hooker.

[It will be recollected that we expressed a doubt whether the report of "A Delegate," in our last, was accurately stated; but knowing the source whence we received it, we had no reason to imagine any "misrepresentation." Dr. Hooker and he must settle the matter.]—*N. Y. Med. Gaz.*

SIXTH MEETING OF THE ASSOCIATION OF MEDICAL SUPERINTENDENTS OF AMERICAN INSTITUTIONS FOR THE INSANE.

The following are the propositions referred to in our report of the proceedings of this body in the June No. which were postponed for want of room.

Dr. Kirkbride, from the standing committee on the construction of Hospitals for the Insane, in compliance with the resolution adopted last year, read a report, containing a "series of Resolutions or Propositions, affirming the well ascertained opinions of this body in reference to the fundamental principles which should regulate the erection and internal arrangements of American Hospitals for the Insane."

I. Every Hospital for the Insane should be in the country, not within less than two miles of a large town, and easily accessible at all seasons.

II. No Hospital for the Insane, however limited its capacity, should have less than fifty acres of land, devoted to gardens and pleasure grounds for its patients. At least one hundred acres should be possessed by every State Hospital, or other Institution for 200 patients, to which number these propositions apply, unless otherwise mentioned.

III. Means should be provided to raise ten thousand gallons of water, daily, to reservoirs that will supply the highest parts of the building.

IV. No Hospital for the Insane should be built, without the plan having been first submitted to some Physician or Physicians, who have had charge of a similar establishment, or are practically acquainted with all the details of their arrangements, and received his or their full approbation.

V. The highest number that can with propriety be treated in one building is two hundred and fifty, while two hundred is a preferable maximum.

VI. All such buildings should be constructed of stone or brick, have slate or metallic roofs, and as far as possible be made secure from accidents by fire.

VII. Every Hospital, having provision for two hundred or more patients, should have in it at least eight distinct wards for each sex,—making sixteen classes in the entire establishment.

VIII. Each ward should have in it a parlour, a corridor, single lodgings for patients, an associate dormitory, communicating with a chamber for two attendants; a clothes room, a bath room, a water closet, a dining room, a dumb waiter, and a speaking tube leading to the kitchen or other central part of the building.

IX. No apartments should ever be provided for the confinement of patients, or as their lodging rooms, that are not entirely above ground.

X. No class of rooms should ever be constructed, without some kind of window in each, communicating directly with the external atmosphere.

XI. No chamber for the use of a single patient should ever be less than eight by ten feet, nor should the ceiling of any story occupied by patients be less than twelve in height.

XII. The floors of patients' apartments should always be of wood.

XII. The stairways should always be of iron, stone, or other indestructible material, ample in size and number, and easy of ascent, to afford convenient egress in case of accident from fire.

XIV. A large Hospital should consist of a main central building with wings.

XV. The main central building should contain the offices, receiving rooms for company, and apartments entirely private, for the Superintending Physician and his family, in case that officer resides in the Hospital building.

XVI. The wings should be so arranged, that if rooms are placed on both sides of a corridor, the corridors should be furnished at both ends with moveable glazed sashes for the free admission of both light and air.

XVII. The lighting should be by gas, on account of its convenience, cleanliness, safety, and economy,

XVIII. The apartments for washing clothing, &c., should be detached from the Hospital building.

XIX. The drainage should be under ground, and all the inlets to the sewers should be properly secured to prevent offensive emanations.

XX. All Hospitals should be warmed by passing an abundance of pure fresh air from the external atmosphere, over pipes or plates, containing steam under low pressure, or hot water, the temperature of which at the boiler does not exceed 212 degrees F., and placed in the basement or cellar of the building to be heated.

XXI. A complete system of forced ventilation, in connection with the heating is indispensable to give purity to the air of a hospital for the Insane, and no expense that is required to effect this object thoroughly, can be deemed either misplaced or injudicious.

XXII. The boilers for generating steam for warming the building should be in a detached structure, connected with which may be the engine for pumping water, driving the washing apparatus, and other machinery.

XXIII. All water closets should as far as possible be made of indestructible materials—be simple in their arrangement, and have a strong downward ventilation connected with them.

XXIV. The floors of bath rooms, water closets, and basement stories should as far as possible be made of materials that will not absorb moisture.

XXV. The wards for the most excited class should be constructed with rooms on but one side of a corridor, not less than ten feet wide, the external windows of which should be large, and having pleasant views from them.

XXVI. Wherever practicable, the pleasure grounds of a Hospital for the insane should be surrounded by a substantial wall so placed as not to be unpleasantly visible from the building.

Which propositions having been duly read and maturely considered, were adopted by the Association.

On motion of Dr. Hanbury Smith, it was

Resolved, That the Secretary be instructed to cause the propositions now adopted, in reference to the construction and arrangements of Hospitals for the insane, to be published in the Medical Journals of this Continent, as the Sentiments of this Association, on the subject referred to.

RECORD OF MEDICAL SCIENCE.

PATHOLOGY AND PRACTICE OF MEDICINE.

Case of Small-pox occurring a third time after Vaccination, and proving Fatal. By JOHN WEBSTER, M. D., F. R. S.—Three well-marked examples of the recurrence of small-pox, met with in the same family, were related, one of which terminated fatally. The case especially referred by Dr. Webster was that of H. N. N., who had been vaccinated satisfactorily in 1827, when three months old. Notwithstanding this circumstance, he was attacked by small-pox in 1833, along with an elder brother, who had been likewise vaccinated. Both patients recovered. In 1838 the two lads were again attacked by variola, along with a third brother, likewise regularly vaccinated. All three got quite well in due time. Subsequently, Mr. H. N. N. went to India in the Company's service, where he was seized, in April, 1850, with the usual and well-marked symptoms of small-pox, which soon became confluent, and proved fatal at Dharwarinth, on the 13th of that month; this making the third time this gentleman had been attacked by variola, although previously vaccinated.—*Lon. Journ. of Med., May*, 1851.

Cases of Chorea, Treated Successfully with Carbonate of Iron. By T. BROWN, Esq., Castle Donnington. CASE I.—John Potter, aged 20, living at this place, by trade a painter, was placed under my care March 20th, 1847, a victim of chorea. The symptoms were unusually severe,

and required the employment of energetic measures. Copious depletion, from both the temporal artery and the median cephalic vein, was resorted to, and on account of threatened violence, a strait jacket was at once applied. So much were the voluntary muscles agitated, that when he attempted locomotion, his body was propelled in all directions, producing the most antic motions. When questioned he can only answer by monosyllables. After the copious depletion referred to, and the administration of some strong drastic catharties, the violent symptoms greatly abated. During the three following days the violence of the symptoms continued abated, and the convulsive motions were chiefly confined to the upper and lower extremities. At this period, March 27th, I met Dr. Heygate, of Derby, in consultation on the case, and we agreed to administer the following:—R. Hydr. Chlor., gr. v.; Conf. Rosæ Can. q. s., ut fiat pilula alternis noctibus sumenda.—R Dec. Aloes Co., os. iss.; Pot. Tart., dr. j. M. Fiat haust. cras mane sumend. R. Ferri Carb., scr. ij , ter in die sumend.

I may here mention, that I had for several days previous to Dr. Heygate's visit passed electric shocks through our patient without any relief, in fact I really thought the symptoms aggravated by the treatment. From the period that iron was administered, (the dose of which was gradually increased,) there was evident improvement in every respect, and on or about the 20th of April our patient was quite well.

Case II.—Mary Mugliston, aged 9 years, was seized with chorea on or about the 10th of November, 1850, and the symptoms gradually increasing, on the 20th my assistance was required. I found my patient incapable of walking, speech was prevented, and the want of power over the voluntary muscles evidenced a true case of St. Vitus's dance. Judging from the apparent irritation of the pituitary membrane, in conjunction with anorexia, that the bowels gave lodgement to some *vermes*, I commenced the treatment of the case by giving half-drachm doses of Ol. Terebinth. on sugar, three times a-day, the result of which was the expulsion of a large worm, of the lubricus species. Afterwards drachm doses of carbonate of iron, combined with small quantities of Pulv. Curcumæ, was given three times a-day, and the effects were most satisfactory, and to me very pleasing, the child's power over all the voluntary muscles gradually returned; and a singular feature in the case was, that *the tongue* never failed to indicate the progress of this most satisfactory return to perfect health, which occurred on the 29th of December, 1850.—*Prov. Med. and Sur. Jour., March 5th*, 1851.

Disease of the Pancreas—Diagnosis. By Dr. Fearnside.—After detailing two cases of obscure abdominal disease, in which, after death, the pancreas was the organ chiefly affected, Dr. Fearnside offers the following remarks in diagnosis:—

The earliest phenomena in both cases were the gradual failure of the general health and faulty digestion. To this succeeded *deep-seated pain in the epigastrium*, aggravated a few hours after food; but this he observes may be due to a concomitant irritation of the mucous membrane of the stomach. *Gastrorrhœa* was present in both cases, but as the pancreas

was diseased to such an extent as to prevent secretion, he justly supposes this symptom to be due to vitiated action of the mucous membrane of the stomach.

In one case *ptyalism* was a prominent symptom, and has been noticed in other cases of pancreatic disease. The tongue was *pale and clean* in both cases; the appetite variable.

In one case, *abdominal pulsation* was present. This is a symptom much insisted upon by professor Siebold, when coëxisting with other signs. The urine did not assist the diagnosis. *Emaciation and anæmia* were marked symptoms. From a comparison of these symptoms the author concludes, that though none are in themselves pathognomonic, the reunion of several affords strong probability of pancreatic disease.—*Medical Gazette, December 6th*, 1850.

ANATOMY AND PHYSIOLOGY.

Casein in the Blood; Synthetical Proof by Formation of Artificial Milk.—Dr. Panum, of Copenhagen, of whose interesting accounts of the discovery of Casein in the Blood, we gave a translation in the July number of this Journal for 1850, has published two additional articles on the subject in the *Bibliothek for Læger* for April and July 1850.

In his article in the April number, after recapitulating the facts brought forward in his previous paper, and pointing out the difficulty of establishing a chemical or a physiological distinction between casein and coagulated albumen, the author observes:

"If we institute a comparison between the substance precipitated from blood-serum by means of water and diluted acetic acid, and albumen separated in the same manner from its combination with soda, *we find* truly greater differences than can be distinguished between casein and coagulated albumen.....

"Before the publication of my former contribution, I had already performed various experiments with the view of instituting a more accurate comparison between the material under consideration and albumen separated from its combination with soda. To procure albuminate of soda, I separated the albumen from the serum, then added soda, and applied slight warmth. A greater or less quantity of albumen (according to the quantity of soda employed) entered into combination with the alkali as albuminate of soda, and was precipitated by acetic acid. A difference was here observed between the albumen of serum and that of an egg. For while albumen from an egg required no warming to promote its entering into combination with soda, or its precipitation by means of acetic acid, the albumen of serum had to be slightly warmed before it would unite with an alkali, or give a precipitate with acetic acid.

"The albumen which was precipitated from albuminate of soda, as above described, was always *soluble with difficulty, even in a considerable excess of acetic acid*; eight or ten parts of acetic acid to one of albumen produced no solution. On the other hand, the material *ori*,

ginally present in the serum, and precipitated from it by acetic acid, was soluble in so slight an excess of acetic acid, that it is almost a *finer test of the acid, alkaline, or neutral properties of the liquid, than litmus paper.* This difference seems important; and can scarcely be without essential influence on the organic economy.

"The precipitate thrown down by acetic acid from albuminate of soda, appears as *firm flocks*, which are not changed by shaking, and which resemble what is seen when a not too highly diluted solution of albumen is boiled. The other matter produces a perfectly homogeneous opacity in the liquid, and only after some time forms something like a solid deposit in the bottom of the vessel, which, however, immediately disappears, and is resolved into a general opacity, when the liquid is slightly moved.

"Moreover, if the albumen precipitated from a somewhat diluted solution by boiling, or from a solution of albuminate of soda by acetic acid, be collected in a filter, it forms, when half dry, *an elastic mass, by no means glutinous.* The other substance, on the contrary, when half dry, forms *a very glutinous mass*, almost like turpentine or bird-lime.

"The albumen, when collected in a filter, has, when dry, a *dirty yellow brown colour.* In my previous contribution, I referred to the circumstance, that the substance I am describing sometimes assumed a *beautiful green colour* when thoroughly dried. At that time, I attributed it more to accidental circumstances than to any essential difference, that the substance became green or yellow-brown on drying, as from the same serum I sometimes procured a green and sometimes a yellow product. I now find, that the substance is always of a beautiful green colour when the serum is perfectly clean and free from red blood corpuscles. But if serum be used, in which there is found a greater or less number of blood-corpuscles, the green colour is effaced by the accompanying redness of the blood, and the product becomes either dirty yellow or dirty brown, according to the number of blood-corpuscles. The green colour is removed neither by alcohol, ether, nor water, and seems to belong essentially to the casein.

"However lightly these differences may be thought of, they are yet not less important than the distinction already referred to, between the so-called soluble casein and albuminate of soda. The preconceived opinion that the material under consideration must be albuminate of soda can thus no longer serve as a proof against its identity with what is called casein, or the essential nitrogenous constituent of milk."

Relative Quantity in the Blood.—Dr. Panum states that he is engaged in a quantitative analysis of the casein in different individuals. He does not yet attempt to draw conclusions; but states that in 1000 parts of dried serum he has found in men, in 3 cases, from 4 to 7 parts; in 8 cases of women, from 5·5 to 12 5 parts. The greatest quantities (9·9—11·4—12·5) were in lying-in women shortly after parturition. In nurses there was an average of from 6·5 to 7·4 parts.

Formation of Artificial Milk.—In the July number of the *Bibliothek for Læger*, Dr. Panum writes as follows:—"It occurred to me that

the question of the identity of the material I have been describing with casein, might be solved by the *synthetical* method, which, though it can seldom be satisfactorily employed in scientific diagnosis, yet in the inability of analytical chemistry with regard to the protein compounds, is not to be despised. If it were possible, by adding the necessary constituents, to form from the substance under consideration some universally known product containing casein, such as milk or cheese, we should have a striking proof of the identity of the substance with casein.

I obtained a quantity of serum from bullock's blood. To this I added acetic acid, in the proportion of six drops of concentrated acid to an ounce of serum, and then a considerable quantity of water. The substance described in my former contributions sank, on standing, to the bottom of the vessel, so that the superabundant clear fluid could be poured off. On again adding water and letting the substance sink to the bottom, it was rendered almost perfectly free from soluble albumen, etc. After it had settled as much as possible, the water was poured off, so as not to waste the substance, which remained suspended in a greater quantity of water than casein is diluted with in milk. It was now my object to find out, whether the solution of this substance produced by salts or an alkali could be brought to coagulate by contact with the mucous membrane of the stomach of kittens or puppies; and whether it were possible to produce a substance which, in taste and other circumstances, should agree with milk. But as it would probably be difficult to make animals use the solution as milk, unless the other constituents of milk, namely butter and sugar, were mixed with it, and as the taste and peculiarities of cheese might be modified by them, I first tried, by adding these substances, to produce a liquid which should have some resemblance to milk. At a temperature of 30 Raumur, I added to the milky liquid phosphate of soda, till all the supposed casein was dissolved. I then added butter and sugar in the proportions in which they are usually contained in milk, and, after the butter was melted, I shook the whole mixture in a flask. The liquid, at first greyish or dirty yellow, became of the colour of egg-flip, and, as it cooled, became more and more like milk. The clearer and the less mixed with red blood-corpuscles the serum was, the clearer was the solution and the whiter the milk-like fluid. If the serum was perfectly free from blood-corpuscles, the emulsion, when diluted with water, had the same bluish colour as milk and water; but if there was a strong blood-red tinge in the serum, the solution in phosphate of soda had a reddish and the emulsion a weak yellowish tint. The product had a taste which bore a most striking resemblance to that of true milk; only it was a little more sweet, and left a feeble, though recognisable, bitter after-taste.

Under the microscope, I observed in the emulsion innumerable small globules, exactly like those in milk. On comparing them with those found in milk, scarcely any difference could be perceived, except that their average size in the artificial milk was somewhat greater than in the natural. The globules in the artificial milk were surrounded by a covering, and not simple drops of oil; this covering often showed a

distinct though very fine folding, especially on the larger globules. The globules (like those of true milk) were not dissolved in ether, until the covering had been removed by treating them with nitric acid. But by the side of these small globules there were some which were somewhat greater, and presented in their interior appearances which, if they had been furnished from the organised body, would have been certainly considered as nuclei, granular cell-contents, etc.

As the difficulties, which might have been expected to arise in the microscopic comparison of the artificial and the true milk, had so unexpectedly disappeared, I felt myself called on to inquire whether any more perfect imitation could be attained. The most striking difference, which the artificial milk presented on a superficial examination, was that it required a far shorter time than real milk to form a layer of cream on the surface, and that, after standing some time longer, a layer of clear liquid was formed at the bottom of the vessel. I ascribed this failure to the greater average size of the globules in the emulsion, as compared with true milk-globules. When I employed sugar of milk in place of common sugar, the emulsion was uniform, and shewed no layer of clear liquid at the bottom of the vessel, even when more water was added. At the same time, the average size of the corpuscles became less, so that they could not be distinguished by their size from the true milk-globules, and they were now free from any appearance of nuclei or granular cell-contents. The cream was longer in rising to the surface; and the great sweetness which the emulsion had, when made with common sugar, was no longer prominent, so that the liquid tasted still more like milk. A slight smack of salt disappeared, when the butter was washed in water; and a slightly harsh taste of the butter was still farther removed when unsalted butter was used, which had been freshly churned, and washed with water. There was still a slightly bitter after-taste, but this was removed by using carbonate instead of phosphate of soda; a much smaller quantity of the former salt being required to produce the required solution. It was now impossible for me to recognise, by the taste, any difference between artificial and real milk. As, however, it might be said that "*de gustibus non est disputandum*," I submitted the liquid to the taste of others, with the same result.

It now only remained, to render the agreement perfect between the artificial and true milk, that the former should coagulate when brought into contact with the mucous membrane of the stomach. When I used common sugar, it was not wonderful that my attempts thus to make the liquid coagulate, failed; for it is well known, that the addition of sugar to milk retards or prevents its coagulation. But, even after I had used sugar of milk, I could not perfectly succeed in making the milk coagulate. Instead of fresh calf's stomach, I used the artificially prepared swine's stomach, which is commonly used in the dairies, with or without a temperature of 40 R.; and I also gave the liquid to two kittens, who drank it greedily, and whom I then killed. Under these circumstances, as well as by mere standing, the artificial milk turned,

and separated into a clear liquid, and a thick curdy mass, which had very strongly the well known smell of sour milk; but I could not produce a consistent coagulum, which could be collected in linen, and pressed out. But when the original substance separated from the serum, after being washed from soluble albumen, was warmed, it formed masses resembling pressed curds, and could be collected on a cloth, while the liquid ran through quite clear.

The identity of artificial with natural milk, and of the substance found in the blood with casein, may seem to be not proved; yet the resemblance is so great as to strengthen the probability of their being identical. I have in vain endeavoured to produce from albumen, precipitated from albuminate of soda by acetic acid, and dissolved in phosphate or carbonate of soda, a liquid having the slightest resemblance in taste to milk.—*London Journal of Medicine.*

Anatomy of the Urethra.—Mr. Hancock made the following communication:—Assisted by Mr. Hogg, he had examined, microscopically, the structures surrounding the urethra. He found that the urethra itself was not muscular, but closely invested by organic muscular fibres continuous with the muscular coat of the bladder, which consisted of two layers, an internal and an external. The external passes forwards, and extends over the outside of the prostate gland; the internal, on the contrary, accompanies the mucous lining through the prostate, forming an involuntary muscular covering to the urethra in its passage through the gland. The membranous portion of the urethra is next closely invested by these muscular fibres, which cannot be mistaken for any portion of Wilson's, Guthrie's, or Santorini's muscles, the latter being voluntary, and presenting the usual striated appearance under the microscope, whilst the former are involuntary and nucleated. Continued forwards, they reach the bulb, where they divide, the one part being continued onwards to the orifice of the urethra, lying between it and the corpus spongiosum, whilst the other passes on the outer surface of the corpus spongiosum, separating it from its fibrous investment, to which the fibres adhere pretty closely. These latter are also continued forward to the orifice of the urethra, and, in their course, invest the spongy portion of the bulb, uretha, and glans penis, entering very largely into the formation of that peculiar structure found at the orifice of the urethra, and which appears to consist almost entirely of involuntary muscle and elastic cellular tissue, forming an additional sphincter muscle to those usually described as met with in various parts of the body. It will thus be seen that the corpus spongiosum urethra lies between two layers of involuntary muscle, the one separating it from the urethra, the other from its fibrous covering; an arrangement, doubtless, exerting considerable influence over the expulsion of the blood from the corpus spongiosum when erection of the organ is no longer required, as well as over the emission of urine and the seminal fluid. After the meeting,

Mr. Hancock exhibited, under the microscope, specimens of the muscular tissue just described.—*Ibid.*

Experiments on the Pancreatic Fluid of the Calf.—By M. J. L. Lassaigne.—Since it has been shown that the pancreatic fluid extracted from the dog, enjoys the remarkable property of making an emulsion with oil, and of causing its transformation into fatty acids, either at ordinary temperatures or at the temperatures of the bodies of mammalia; it has become matter of interest to submit to similar experiments the pancreatic fluid obtained from a large herbivorous animal, with the view of ascertaining if it acts in the same manner.

M. Colin, director of the anatomical department of the school of Alfort, having procured some of it, by the method shown to him by M. Bernard, and which he had successfully put in practice with the dog, a small quantity was sent to M. Lassaigne, which he immediately examined.

The pancreatic fluid of the calf, which has an amber yellow colour, is inodorous, is transparent and limpid, and possesses a tolerably marked saline taste; when tested with reddened litmus paper, it restores the blue tint. Heated, it becomes opalescent and turbid, and deposits some coagulated white flakes, which attach themselves to the sides of the vessel in which the experiment is made.

The small quantity at the author's disposal not permitting of a direct analysis, he thought it right to examine, in concert with M. Colin, the action which it exercises on oils.

For this purpose he divided it into several portions in glass tubes, and added to each portion a drop of pure olive oil. The agitation to which he subjected the tubes, formed no emulsion—the oil separating speedily, and floating on the top.

The prolongation of the experiment did not produce any effect, even after eight hours of contact at a temperature of 60 degrees Fahr., the oil having remained neutral, and the liquid preserving its primitive alkalinity. Subsequently exposing these same tubes in a salt-water bath to 100 degrees Fahr., and keeping up this temperature for fourteen hours, produced no change in the properties of the oil, or in those of the pancreatic juice subjected to the experiment.

This result is opposed to that obtained from the pancreatic juice of the dog,—is it constant in the herbivorous animal, or is it an exceptional occurrence due to an alteration in the pancreatic juice of the animal, caused by the painful operation to which it had been subjected? The author does not admit the latter hypothesis, seeing that the animal survived, and did not appear to suffer in health.—*Lond. Monthly Journal of Med. Sience. Journ. de Pharm.*, March, 1851.

On the Chemistry of Respiration.—Dr. Horn has published the results of his experiments on the chemistry of the respiratory process. (*Neue Medicinisch-Chirurgische Zeitung.*) The paper is recapitulated in the following conclusions:—

1. The longer air is retained in the lungs, the larger the quantity of carbonic acid contained.

2. The products of expiration undergo a regular hourly variation.

3. The expiration of carbonic acid increases after the ingestion of food or drink.

4. Children and growing persons exhale more carbonic acid than old people; men more than women, and persons of the sanguine temperament more than those of the lymphatic habit.

5. The use of alcohol increases the exhalation of carbon.

6. Pain, sedentary occupations, menstruation, inflammation, fevers, are so many causes of the diminution of carbonic acid.

7. The exanthemata cause its increase.

The author offers likewise to demonstrate,—

a. That the act of respiration, tends to the maintainance of animal heat, as well as to the purification of the blood.

b. That the act of respiration is in an opposite ratio to the activity of the renal and hepatic secretions.

c. The oxygen is not the only element of the atmosphere which is taken into the blood, the nitrogen is also absorbed and rejected in variable proportions.

d. Irritability increases in proportion to the amount of oxygen absorbed.—*Prov. Med. and Surg. Jour.*

SURGERY.

Tincture of Iodine in the Treatment of External Poisoning.—Dr. T. Smith, of Cincinnati, has used the tincture of iodine, with much success, in several cases of poisoning, the result of contact with the Rhus Toxicodendron (Poison Oak,) Rhus Radicans (Poison Vine,) Rhus Vernx (Swamp Sumac,) &c. Having been frequently called upon to prescribe for this affection, Dr. Smith was lead to the trial of local remedies, likely to prove more prompt than the ordinary antiphlogistic treatment resorted to on such occasions. Within the last two years, he has used the tincture of iodine as a local application, in some half dozen cases, and with such striking good effects, that he confidently recommends it to the profession.—*Abridged from the Western Lancet, May*, 1851.

Imperforate Anus: Life prolonged to the 102nd day without Evacuation.—Emily Plumley was born on the 11th of June 1850; and a day or two after birth it was noticed that she was unable to pass the contents of the intestinal canal as children usually do. The parents, however, took but little notice of the fact, as one of the neighbor's children had had a similar condition of parts, and had lived comfortably for more than a month.

When the child was a month old it was admitted as a patient at the Bristol Royal Infirmary. An examination of the nates disclosed a well-formed anus, into which the point of the little finger could be passed, and through which a probe or director might be made to enter about a

quarter of an inch, when it met with firm resistance. She had never passed any meconium or other contents of the intestine, but she passed water freely, took her natural food as infants ordinarily do, and had not been sick nor apparently in any way uneasy.

Upon consultation it was considered a very favorable case for an explorative puncture, to be followed up by passing a curved trocar in the suitable direction along the curve of the sacrum, for as there was a naturally-formed anus it was more than probable that the greater part of the rectum was also there. To this the mother would not consent, although the certain death of the child, if no operation was performed, was pointed out to her; and she accordingly took it away. One of the students, however, found out where she lived, and kept his eye upon the case. The child died on the 21st of September, having lived one hundred and two days, or more than three months, without ever having had an evacuation of the bowels, and having been scarcely at all sick. It never threw up anything like fæcal matter, but now and then a little of the mother's milk regurgitated, as in the case with most children. In fact, the mother stated that it was scarcely as sick as her other children were at the same age.

Post-mortem examination, Sept. 23.—The limbs were very thin. The abdomen much swollen; the circumference of the body measured twenty inches and a half, and it was twenty-one and a half inches in length. The organs in the chest were quite sound; the liver was of a dark purple color externally, but had a more natural appearance when cut. The stomach and first part of the small intestine were in a natural state; but about the end of the jejunum it began to be dilated, and all the lower part of the ilium was enormously distended, so as to be really longer in calibre than that of an adult; its contents were almost entirely gaseous. The cæcum was situated in the right hypochondrium, immediately below the liver. The large intestine was also much dilated, and at the lower part of the rectum measured at least four inches in diameter. At the sigmoid flexure there was a slight contraction, so that the rectum itself appeared like a large and separate pouch, and this was full of yellow and fluid fæcal matter. The muscular structure of this part of the alimentary canal was much hypertrophied, and large and distinct bands of fibre could be seen surrounding the cul de sac of the rectum. The termination below was a rounded fibrous chord, as thick as a crow quill, leading to the anus; and there was not more than a quarter of an inch between the lower part of the pouch which has been described and the highest point to which a probe could be passed through the natural aperture below. The kidneys were healthy; the bladder was distended with urine; and the ureters were very much enlarged in their canal, from the constant pressure exerted by the rectum upon the organs within the pelvis. There was a short diverticulum projecting from about the middle of the small intestine.

This case appears to me to be of considerable importance; for it shews beyond a doubt that if a child is otherwise healthy we need be in no great hurry as to operative proceedings; and that the milk of the mother is well adapted for the nutriment of the infant that although it lived for

three months and never had any evacuation, the collection of fæcal matter was only sufficient to fill the distended pouch in the rectum, and probably amounted to half a pint. Of course, also, any operation that might be undertaken in such a case would be rendered easier by a larger collection of fluid contents in the intestine.—*Prov. Med. and Sur. Jour., March 5th*, 1851.

An Indolent Ulcer, speedily cured by the Electric Moxa.—Mr. Bransby B. Cooper, in a clinical lecture, reported in the London Medical Times, 24th May, 1851, gives an account of a rapid cure of an obstinate indolent ulcer, of two years standing, by the use of electric moxa. The mode of applying this agent is as follows: "There is no complicated apparatus required; no obstacle, no impediment to its application in the hands of the General Practitioner. All that is necessary is a piece of zinc and silver foil, each about the size of a crown piece, which, connected together with a few inches of copper wire, forms the metallic portion of the battery, which is completed by the intervention of the living tissues.

A blistered surface being made a short distance from the sore, the zinc plate placed on this, and the silver plate on the sore itself, a simple galvanic battery is at once formed, and a circuit of electricity established, passing in a direction from the zinc or generating plate by molecular decomposition through the fluids of the tissue to the silver or conducting plate, and thence reconducted to the zinc whence it originated, by (according to the modern doctrine) a polar arrangement of the constituent molecules of the copper wire, thus completing the circle. The battery is excited by the chloride of sodium contained in the animal fluids,—the chlorine being set free at the zinc plate, combines with this metal, forming chloride of zinc, which, acting as an escharotic, gives rise to the eschar that is produced; whilst the sodium, being liberated at the silver plate, to which it gives up its positive influence, immediately decomposes water, combines with its oxygen, and sets free hydrogen. It is not absolutely requisite to denude the dermis by means of a blister previous to the application of the moxa; for if the cuticle be moistened with a solution of chloride of sodium or common salt, when the zinc plate is to be applied, a galvanic current is established, and chloride of zinc formed, which soon destroys the cuticle, and produces an eschar of the subjacent parts, if its application be persisted in."

OBSTETRICS.

Medical Society of London, Feb. 22d, 1851.

Dr. Tilt read a paper on *Diarrhœa as a hitherto Unnoticed Symptom of Menstruation, and on the use of Purgatives at the different Epochs of Menstruation.*

He premised that Friend and Brierre de Boismont not having given a description of catamenial diarrhœa in their works, he concluded that

it was not generally known to the profession. He then inquired into the nature and frequency of catamenial diarrhœa; whether it occur—

1. At the prodroma of menstruation.
2. During its regular establishment.
3. At its cessation.

1st. As a symptom of the prodroma of menstruation diarrhœa rarely occurs; according to Dr. Tilt's observations, once only in 161 cases.

2d. As a symptom of regularly established menstruation, it occurred in 88 instances of 161 women carefully interrogated as to this point. In these 88 cases it *preceded* the menstrual flow in 45; *accompanied* it in 31; *both preceded and accompanied* it in 10; and in 2 instances habitually *followed* it. In the cases of precursory diarrhœa the bowels were in general costive until the cessation of the catamenia.

3d. As a symptom of menstruation at its cessation diarrhœa was much less frequent than is generally believed, occurring in 1 per cent. only of such cases.

The diarrhœa is generally unattended by pain, but sometimes preceded for two or three days by nausea and slight colics; in one case those symptoms lasted eight days previously to the diarrhœa. When it occurs at the change of life, it generally appears at irregular intervals. It may, however, adopt the irregularity of the catamenia. As a general rule, when diarrhœa has habitually accompanied menstruation, there is, at the change of life, a gradual diminution and ultimate cessation of *both* discharges. As a prodromic symptom diarrhœa scarcely ever occurs. It is found in 8 per cent. of cessation cases, and a very frequent precursory symptom of fully established menstruation. He therefore drew the physiological conclusions, that for the performance of menstruation the ovaries not only determine their secretion from the womb, but often call into concentraneous action most of the organs which, being subservient to nutrition, are supplied by the same ganglionic system, and particularly the intestines, with which they are in such close juxtaposition. He then proceeded to the rules which he thought should be adopted in the administration of purgatives:—

1. During the prodroma.
2. During the regular establishment.
3. At the cessation of menstruation.

1st. *Use of purgatives during the prodroma.*—Dr. Tilt concluded from the rarity of this function being preceded by diarrhœa, that nature does not indicate purgatives at this period, while experience has proved the painful consequences frequently entailed by their being administered as emmenagogues.

2d. *Use of purgatives during fully established menstruation.*—In this stage, Dr. Tilt considers they may be given with advantage in serious organic or uterine lesion contra-indicating their use, the great point being so to give them as not to interfere with the menstrual type. As this cannot be done with impunity in the majority of women, brisk purgatives given a few days before the menstrual epoch often anticipate it by several days, and thus vex nature in one of her most constant laws.

Previously, therefore, to their exhibition, an inquiry should be made as to the number of days the diarrhœa usually precedes the menstruation; or, if the patient has not the symptom, the date of appearance of other menstrual symptoms will be a sure guide as to the fit time for giving purgatives.

Dr. Tilt next indicated the value of purgatives in amenorrhœa and chlorosis. He does not confide in them alone, but they only form the initial part of the treatment. He first gives an ameto-cathartic, and then steel and bitters. If the appetite does not improve, and the bowels remain sluggish, he omits the tonic treatment, and gives another emeto-cathartic.

Dr. Tilt is of opinion that purgatives given just before the menstrual epoch are injudicious, as they might increase the flow nature seeks to diminish, but recommends the frequent use of mild aperients to diminish the plethora of the abdominal viscera. Purgatives should also be given after the *expiration* of menstruation, with the same view.

Dr. Tilt frequently orders five or ten grains of the soap and aloes pill before dinner, and states that he has never seen hæmorrhoidal affections caused by the use of this pill, but often relieved. He also often administers flowers of sulphur alone, or else with an admixture of sesquicarbonate or biborate of soda, in the proportion of ʒj. to ʒj., and sometimes with the addition of 5 to 10 grains of ipecacuanha: of this powder, the dose is ℈j. ad ℈ji. ounce a day in milk.

In the discussion that followed, the connection of diarrhœa with menstruation was shown not to be an entirely novel observation. Some of the speakers considered it to be indicative of a morbid condition of the uterus, and others as a revulsive to the uterine secretion. Dr. Tilt's opinions were supported by few of the Fellows who spoke on the question.

It was also argued that the number of observations was too small to enable the author of the paper to discover a natural law, one Fellow (Dr. King,) asserting that statists had agreed that at least ten thousand observations of a vital phenomenon were required before the law regulating such vital phenomenon could be safely deduced.

It was stated that Dr. Butler Lane had published a paper proving, from 200 observations, that *constipation* was the attendant upon menstruation.

Objections were also offered to the exhibition of the aloes, as being productive of hæmorrhoids.

Dr. Tilt, in reply, said that he brought forward the results he had already obtained with the full knowledge of their imperfect form, in the hope of testing their value by the experience of others. He had learned with pleasure that Dr. Butler Lane had deemed the subject worthy of investigation, and he owned that he had derived information from the present discussion; while he regretted that he had not met several objections by stating in his paper the manner in which he had conducted the inquiry. His statements did not refer to *diseased*, but truthfully represented the phenomena of *healthy* menstruation, and could stand the physiological deductions he had drawn from them; for he had long been in

the habit of inquiring from all the female patients who sought his advice, what was the habitual state of the menstrual function during the period of health. Chlorotic patients, whom he invariably found subject to constipations or those laboring from severe uterine disease (in whom as Dr. Bennett had stated, diarrhœa existed, and often assumed a morbid intensity proportioned to that of the disease,) were carefully excluded from the 161 cases. Such facts, as well as the judicious observations of Dr. Murphy and Dr. Hunt, confirmed Dr. Tilt in his views. He regretted the impossibility of reconciling the discrepancies of those who had spoken the properties of aloes, being himself in the constant habit of prescribing the aloes and soap pill at dinner-time as an eccaprotic. He had never seen it produce hæmorrhoidal affections; and he maintained, that those whose opinions were at variance with his own must have given it in a different manner, in larger quantities, and to patients predisposed to such affection.—*London Med. Gaz.*, March 7, 1851.

CHEMISTRY.

Means of Solidifying Foot Prints.—It is often a matter of great importance in medico-legal investigations, to preserve an accurate mould of foot-prints; for this purpose M. Hugoulin (*Annales d' Hygiene*) recommends the following plan:—An iron plate supported by bars, is so placed as to be about three or four *centimetres* above the mark to be solidified, and upon it live coals are to be placed so that heat may radiate to the subjacent soil. When this has become heated to about 100°C., *stearic acid*, reduced to impalpable powder, (by previously dissolving it in its weight of alcohol, and then having added abundance of water, evaporating,) is to be dusted over it through a fine hair seive, so as to form an uniform layer. This, falling as a snowy dust, cannot by its weight injure the impression, and is indeed dissolved and absorbed as soon as it touches the soil. It is continued until the earth has become too cold to dissolve any more. After a sufficient time has been allowed for it to have become completely cold, the earth is mined round at some distance so as to raise the entire mass in a single piece, cutting afterwards carefully away the superfluous soil. After reversing it on several folds of linen, and surrounding it with a case, plaster is allowed to run in between the case and the reverse of the impression, so as to ensure complete solidity to it. If the soil is muddy or marshy, before commencing these operations, a trench should be dug around, into which plaster is to be introduced, which, on solidifying, will absorb much of the moisture, after which the whole mass may be exposed for some days to the sun and air before commencing to act upon it. M. Hugoulin says this plan is applicable to the most shifting soils, as sand &c., and indeed to all except snow.—*Prov. Med. and Surg. Jour.*

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ORIGINAL COMMUNICATIONS.

To the Editors of the Medical Examiner:

GENTLEMEN:—I have extracted from my "case-book," and now place at your disposal, the history of a case of Tubercular Meningitis, which will serve to illustrate the obscurity which sometimes attends the commencement and early stages of this disease.

Yours truly,
FRANCIS WEST,
852 Chesnut St.

Philada., July 20th, 1851.

Oct. 24, 1837.—I was requested to-day to visit, for the Dispensary, a colored girl, aged 25 years, unmarried, living as a domestic in the family of ———, Lombard St. The patient was in the act of lighting the entry-lamp when I arrived. Upon examination, she complained chiefly of cough and pain in her chest beneath the clavicles, with some sore throat. Her complexion and general appearance were strongly indicative of the scrofulous diathesis, and led me to suspect the existence of pulmonary tubercles. An appropriate treatment was accordingly directed. Two days afterwards I saw her again; she was then in bed and complained of shooting pains through her head, particularly in the scalp, apparently neuralgic in character. Her

pulmonary symptoms were better. The skin was but moderately warm; pulse not much excited; no sickness of stomach. Cups were ordered to the nape of the neck, with some laxative medicine. On the next day she expressed herself as relieved of the headache, but she now had all the ordinary symptoms of fever—dry tongue, thirst, hot skin, no appetite, &c. Neutral mixture was directed and a strict diet enjoined. In a day or two she was much better; tongue cleaning; skin cool and natural; pulse quite regular in every respect. During all my visits I had noticed in her an indisposition to communicate freely either with the family or myself, together with some somnolency at times, both of which conditions, however, were traced by the family to "natural sullenness." (This kind of taciturnity is very generally remarked as one of the characteristic symptoms of tubercular meningitis, and such is my own experience.)

On the 28th, at noon, four days after my first visit, my attendance was requested in haste, as the patient had suddenly become much worse. I found her almost insensible, with hot skin; pulse about 100, small and tense; tongue brown and dry; abdomen very painful, especially upon pressure, chiefly evinced by contortion of the countenance. Blisters were directed to her ankles, fomentations to the abdomen, with free cupping over same part, and cool drinks.

In the evening much the same; cups had not drawn well. At this time I was "halting between two opinions," not feeling perfectly assured whether the cerebral symptoms were primary or only sympathetic of abdominal disease. Small doses of calomel (gr. $\frac{1}{8}$) had been directed in consequence of the black-colored, tarry appearance of the stools. In the evening she was directed to be freely leeched to the temples and behind the ears, and to have purgative enemata administered. These latter brought away large quantities of black, tarry matter, the discharge of which was followed by such marked amelioration of the symptoms that I scarcely regretted the omission of the leeching, through negligence of the leecher.

Oct. 29.—Patient is much better this morning. Quite sensible, and has spoken to those about her so intelligently, as to induce a belief that the cerebral symptoms were the effect of an overloaded and unhealthy condition of the bowels. Injection

repeated; tongue much cleaner and more moist; desired nourishment. Notwithstanding this apparent amendment in some of the symptoms, she nevertheless at times, evinced a good deal of somnolency and indisposition to mental exertion. This was attributed as before, in a great measure, to natural temperament, and did not materially abate the favorable prognosis drawn from the other circumstances mentioned. Light nourishment was allowed, and revulsion kept up internally, by purgatives, and externally, by sinapisms, applied to the lower extremities.

On the next day she sat up on the side of the bed for an hour and a half, her muscular power being but little impaired. During a few days back, she had had no fever, pulse but little above the natural standard, the only marked deviation from health indeed, exhibited by her, being occasional *somnolency*, and more or less constant *mental dulness and inertia.* At times, when spoken to, she replied without exact meaning to her words—her mouth is kept more or less constantly closed, and she manifests unwillingness and hesitancy about protruding her tongue. She is able to swallow perfectly, and with her own hands put some grapes into her mouth and ate them with apparent relish. Her eyes are rather vacant, but occasionally they *become fixed* upon the person speaking to her, betraying, however, consciousness of what is said. When asked, she does not complain of any head-ache; is able to sit up in bed against a chair without any fatigue; abdomen painfully sensible to pressure. The somnolency has slightly increased; head of perfectly natural temperature; general surface quite pleasant in regard to heat and moisture—pulse about 100 and strong; is unwilling to protrude the tongue; there is not, and never has been, the slightest disposition to convulsion or paralysis. Bowels open, with black discharges—no vomiting; during the whole attack her skin has been strikingly insensible to the action of blisters and sinapisms, none of which have produced any effect. Position in bed quite natural, but remains almost immoveably the same. Upon making an effort to arouse her by talking to her and gently slapping her chest, she turned and looked indifferently at me. She continued much in the same condition from this time until the 10th of the following month, (November.) Now and then the symptoms remitting a little, but upon the whole sensibly and gradually increasing. In

consequence of sickness in the family, it became necessary to-day, Nov. 11th, to remove her from the house. The removal was effected as easily as possibly, but was followed by very great prostration, requiring the free use of active internal stimulants. On the 12th, two days after reaching her new quarters, she was suddenly attacked by paralysis of the whole left side of her body, and on the following day she died.

Autopsy—12 hours after death. Tubercles disseminated generally throughout the organs, the lungs being perfectly studded with them. They were miliary in character. The alimentary canal presented nothing remarkable—the peritoneum was slightly inflamed throughout, with depositions here and there, of minute tubercular granulations.

The brain, or rather its investing membranes, exhibited evident traces of the disease which had so insidiously commenced, and had been so obscurely marked throughout the great part of its course. The brain was slightly congested at several points, but was unchanged in consistence.

The membranes covering the upper portion or convexity, especially the pia mater, were very much injected and slightly thickened, with patches which were perfectly white and opaque, the whole being raised by a lactescent serous fluid effused beneath, which at the very summit gave the appearance of a distended sac. The same kind of lesion exactly was found at the base of the brain; the membranes at this point, and especially the pia mater covering the tubercula quadrigemina, enclosing a considerable deposit of purulent matter, mixed with tuberculous secretion in form of small granulations and shreds. Throughout the membranes themselves too, minute tubercular granulations were observable, resembling the appearances presented in the arachnitis of children.

In the opinion of all present at the autopsy, the disease must have been progressing for some time, and yet it failed to manifest itself at all, until about 18 days before the fatal result; and indeed, as before observed, the only *constant* symptoms of cerebral disturbance, were the sullen disposition and mental dulness! In more than one case of tubercular meningitis falling under my care, precisely the same condition has been remarked; and in one instance particularly, this kind of lesion manifested itself by what was believed to be an attack of acute mania.

In the present case the patient complained of pain for a short time only, and just after the attack commenced. This symptom is usually a very prominent one in tubercular meningitis. The abatement for a time of the cerebral disturbance, with the accession of the ordinary phenomena of continued fever, coupled with the almost entire disappearance of disease, after the free discharge from the bowels, were calculated to confirm the suspicion of its abdominal character; and to lead to some confusion of diagnosis. This not unfrequently happens in cases of tubercular meningitis, not very clearly marked, its proper symptoms being obscured by, and at times almost completely merged in those proceeding from sympathetic or primary disorder of other parts, and especially of the alimentary canal. This alternation of one class of symptoms with the other, makes it necessary for the physician to exercise special care and discrimination in fixing positively the *locale* of the disease, which is thus liable, as has been seen, to exhibit such uncertain manifestations. In the early stage of tubercular meningitis, and whenever more certain signs are wanting, the occurrence of continued somnolency, with dulness of intellect and a moody, sullen disposition, will materially assist in the detection of the disease, or at least should always lead to the suspicion of its existence. The external indications of a tubercular diathesis, together with the discovery, by physical signs, of the actual presence of tubercles in the lungs or other organs, will, of course, go far in corroborating our judgment upon this important point. At the period of making the present observation, the above mentioned aid to a correct diagnosis, unhappily, was not employed to the extent which all should now unite in recommending.

The history of the case may, perhaps, serve to put others, as it ever since has done myself, more and more upon their guard in treating obscure, or imperfectly marked tubercular meningitis.

Case of Severe Wound of Abdomen.—Recovery. By P. G. Bertolet, M. D., Berks Co., Pa.

On the 20th of September, 1848, I was called to see H. G., æt. 12 years, who was gored by a bull at 8 o'clock, A. M., and reached the patient about an hour after the occurrence of the

accident. His clothes were literally torn into shreds, and covered with blood and dirt, while he vomited almost incessantly frothy matter mixed with blood. On removing his clothes, the following injuries were presented:

On the left cheek was a lacerated wound, extending from the angle of the mouth towards the ear about one and a half inches. It bled very little. Other parts of the *head* and *face* were much bruised and swollen.

Upon the anterior and posterior surface of the *thorax* were several severe contusions.

About an inch anteriorly and a little below the angle of the twelfth rib, on the left side, was a lacerated wound of the *abdomen*, running almost directly forwards, one and a quarter inches in length. Through this opening in the abdominal parietes protruded a portion of lacerated *omentum*, the size of a man's hand, and ten inches of the *colon*, probably a portion of the sigmoid flexure of that intestine. (That it was this intestine, was obvious from the peculiar arrangement of its longitudinal fibres or bands.) The protruding portions of the omentum and gut were matted with the torn clothes, and covered with sand and grass.

The coats of the *colon* were, however, entire, with the exception that several portions of it were stripped of the peritoneal coverings, and in one spot much contused, causing thickening by infiltration and swelling. It was pretty firmly held by the lips of the wound, so as to cause partial strangulation.

It is probable that the horn entered the abdomen at the wound, passed obliquely downwards and backwards, and upon its withdrawal produced the condition of things described.

There were three other extensive lacerated wounds—one involving the *scrotum;* one the upper and posterior part of the *thigh;* and the other of the *nates.* These wounds were nearly in a direct line, and appear to have been made by a single gash with the horn obliquely across the nates and thigh of the boy, from right to left.

The wound of the scrotum was triangular in shape, one angle extending to the root of the penis, so that fears were entertained that the urethra might be injured. The left testicle was denuded of all its investments, leaving the organ bare and pendulous by its cord.

The two other wounds were deep lacerated flesh wounds; that on the *right buttock* severed the glutæi muscles throughout their depth, while the opposite one involved the heads of the posterior muscles of the thigh. The sciatic nerve was torn off at this place, and nervous threads were drawn out, some six inches in length; these lacerated and protruding fasciculi were cut away with the scissors.

Fortunately the lad, after receiving so many hard knocks and bruises, had no fractured bones. The lower extremities were severely bruised in several places, but nearly all the suffering was referred to the left leg.

The patient was insensible during the greater part of the investigation and dressing, muttering incoherent words, but at times he would rouse up as from fear. I have seen a number of surgical cases during an extensive rural practice of six years, but never did I discover life in such a mutilated human being. He was of a passive temperament and had a strong constitution.

After acquainting myself with the position of the patient, without delay the aid of Drs. Darrah and Filbert was sought, who arrived at 10 o'clock, during which time I busied myself in cleansing and washing the patient.

On *consultation*, it was concluded that by reducing the protruding viscera and dressing the wound upon general principles, and by observing the strictest precautions in the regimen, the best possible chance would be afforded to the patient.

The injuries of the abdomen required our first attention. The protruding viscera were carefully cleansed and reduced by taxis; but it was not until half an hour's patient and careful perseverance, that we succeeded in the reduction of the *colon*. It was then pushed back as far as possible with the point of the finger, in order to bring it to its natural position.

The protruding omentum was much lacerated, (so that it appeared like coarse fringe,) and these loose and pendulous shreds were removed with the scissors; and after bathing it with cold water, which restrained the oozing hæmorrhage, it was reduced, and the wound carefully closed with the interrupted suture and a few strips of adhesive plaster; over this was applied a compress, and the whole dressing was retained by a broad roller, which served at the same time to keep the parts at rest.

Immediately after the reduction of these organs, the vomiting ceased, and the patient became more rational. The pulse also became fuller and stronger, having been previously very small and weak.

Next we introduced a catheter into the bladder, in order to ascertain the continuity of the *urethra*, for which fears were entertained; it however passed readily. The wound of the *scrotum* was closed by bringing together the loose coverings over the testicle to the root of the penis, and the edges retained by the glover's suture.

The wounds of the nates and thigh were also closed with sutures, in order to obtain all possible immediate union; and to give permanency to the sutures, adhesive strips were applied over them. A layer of charpie, smeared with simple ointment, was applied over this as well as that of the scrotum; and all these dressings were retained with several rollers.

The laceration of the lip was closed with the twisted suture.

It was now 12 o'clock, M., and the wounds of our patient were all dressed; he was now placed in a clean bed, loosely covered with a sheet or two, after which he expressed himself more comfortable.

The strictest precaution was given to the nurse to have the patient kept absolutely quiet, both mentally and corporeally. Diet, about a teacupful of rice water per day, and an opiate, if he should at any time become very restless.

Sept. 21*st.*—Eight o'clock, A. M. Found patient conscious and cheerful; complains of little pain, except in his left leg; he has slight tenderness on the right side of the abdomen, but none around the wound on pressure; some distention, or at least tendency to meteorism; vomited none; slept several hours during the night. Pulse 102 per minute. Thirst moderate. Tongue a little furred along its centre. Urinated freely—urine of limpid color. Had no alvine evacuation. Wounds gave patient little suffering and discharged very little.

It was deemed prudent to defer moving the bowels as long as possible; but directions were given, if the flatulency and colicy pains should become more troublesome, they should give two drachms of castor oil with twenty drops of laudanum, to be repeated every three hours alternately with enemata consisting

of milk and water, half a pint, with castor oil, to be continued until relief was afforded or the bowels opened.

The dressings were left untouched and the rest of the treatment continued.

Seven o'clock, P. M. Found that the patient had vomited all medicines given after the use of the first enema, and the bowels were not opened. The abdomen greatly distended and sensitive to pressure. Patient is weak, delirious and restless; pulse small and 140 per minute; took no nourishment during the day; vomited bilious matter all the afternoon.

Continued the enemata with some laudanum added, and after several injections the patient became composed.

22*d*.—Nine o'clock, A. M. Patient rational; distention of abdomen much diminished; has little pain, except in his right side (of the abdomen;) pulse soft and 88 per minute; partook of rice water this morning; vomited none since 4 o'clock; glysters brought away some feculent matter; urinated none for fifteen hours; drew away with the catheter about a pint of urine, which greatly relieved the pain in his abdomen.

Seven o'clock, P. M. Continues the same as in the morning.

23*d*.—Half past ten o'clock, A. M. General appearance of patient good, but has more thirst; tongue dry and red along its centre; surface somewhat hotter than natural, but skin feels moist; slept some during the night; complains of little pain, but nausea; voided some alvine matter with injections; urinated freely; wounds begin to suppurate. Treatment, with the omission of the glysters, was continued.

24*th*.—Nine o'clock, A. M. Found patient cheerful; pulse 75 per minute; respiration free; skin moist; less thirst; tongue moister and softer than yesterday; says he has no pain, even not in the abdomen under moderate pressure; tympanitis disappeared, and had the first natural evacuation this morning. Passed a comfortable night, and was disturbed only once, while dreaming about the *bull;* calls for more nourishment. The wounds were suppurating freely; found it necessary to change (for the first time) the dressings. The greater portion of the wound of the abdomen had already united, leaving open only its posterior extremity, which discharged healthy pus, with some sanious fluid. The wounds in general looked well, and the simple

dressing was reapplied. The wound of the cheek being united, the needles were withdrawn. Treatment continued.

25*th.*—General condition of patient as yesterday. Tongue begins to clean off.

26*th.*—Patient says he feels well, and asks for more liberal diet.

27*th.*—Gave a dose of castor oil, which brought away a copious stool containing fine dead lumbricoides; felt well on the evacuation. Wounds discharge freely; craves more food. Directed the addition of one cracker per day to his bill of fare, and substitute a pill of Ex. Hyoscyam. at bed time in place of the opiate.

28*th.*—Patient doing well; wounds begin to granulate finely, except that of the scrotum, which is somewhat indurated; emollient poultices to be applied to this.

The bowels were deranged from time to time, but were speedily brought to act by means of a little oil or a glyster or two.

30*th.*—Doing well; ordered some chicken broth.

Oct. 2*d.*—Found patient doing so well, that I deemed it superfluous to continue regular visits, but left strict orders that he should not assume the erect posture too soon, &c.

Nov. 11*th.*—I was again requested to see this boy, and upon examination found a prominence of the abdominal walls, several inches anterior to the place of the wound. The tumor measured about two inches in diameter at its base, while its surface was elevated about three-fourths of an inch above the surrounding parts. This condition of things was undoubtedly brought about by the patient's own imprudence, by assuming the erect posture sooner than was compatible with either his physician's directions or his own safety. The walls of the abdomen were not yet sufficiently strong to bear against the loaded viscera, and yielded under the pressure.

A truss with a large pad and easy spring, made expressly for him, relieved the case, and his protrusion has long since disappeared, and he has dispensed with his truss.

During the treatment the patient complained of *much* pain in his left leg, though some of the most important nervous trunks of this limb were severed. He slowly regained the use of the limb, the motion of it being at first very imperfect,

but in the course of several months regained its perfect use. The lad is now in excellent health.

The patient has recovered so perfectly, that a suit entered by his friends against the owner of the bull, was decided in favor of the defendant, the legal body finding nothing for which to allow plaintiff any damages.

Medical Wards of St. Joseph's Hospital, from May 1st to July 18th.—Service of DR. W. V. KEATING. Reported by JAMES GREEN, M. D., Resident Physician.

Disease.	Cured.	Relieved.	Died.	Removed.	Remaining.	Total.
Albuminuria	0	0	1	0	0	1
Amenorrhœa	3	0	0	0	2	5
Anasarca	0	0	1	0	0	1
Anemia	2	0	0	0	0	2
Asthma	0	1	0	0	0	1
Bronchitis, acute	2	0	0	0	0	2
" chronic	1	1	0	0	1	3
Cephalalgia	1	0	0	0	0	1
Cholera morbus	1	0	0	0	0	1
Chorea	0	0	0	1	1	2
Constipation	1	0	1	0	0	2
Delirium tremens	11	0	1	1	1	14
Dysentery	3	0	0	0	3	6
Dyspepsia	1	2	0	0	0	3
Endocarditis	0	0	0	1	0	1
Erysipelas	3	0	0	0	0	3
Fever, intermittent	2	0	0	0	0	2
" remittent	0	0	0	0	1	1
" typhoid	5	0	0	0	3	8
" typhus	7	0	1	0	2	10
Gastritis, acute	1	0	0	0	0	1
Hysteria	0	0	0	0	1	1
Melancholia	1	0	0	0	0	1
Monomania	0	0	0	0	2	2
Otorrhœa	0	0	0	0	1	1
Phthisis	0	0	4	1	1	6
Pleurisy	2	0	0	0	0	2
Pneumonia, acute	2	0	0	0	0	2
" chronic	3	0	0	0	1	4
" pleuro	1	0	0	0	1	2
" typhoid	0	0	1	0	2	3
Procidentia		0	0	0	1	1
Prolapsus uteri	2	0	0	0	0	2
Rheumatism	3	0	0	1	2	6
Scarlatina	2	0	0	0	0	2
Spinal irritation	1	0	0	0	2	3
Struck by lightning	1	0	0	0	0	1
Tonsillitis	1	0	0	0	0	1
	63	4	10	5	28	110

The case of constipation referred to in the report presents some points of interest; we therefore present the daily notes of the symptoms and treatment, together with the autopsy.

Ellen Carrigan, æt. 20, born in Ireland, been 3 years in this country, admitted into the St. Joseph's Hospital, June 1, 1851, about 5 P. M. Gave then the following history of her case:—

She had been living near the Schuylkill, and had suffered from intermittent fever, for which she had been treated and considered cured. At 5 o'clock in the evening of the day on which she was admitted, she woke up suffering extreme pain in the abdomen; medical aid was obtained, but finding comparatively no relief, she resolved to enter the Hospital.

When first seen by Dr. Green, the resident physician, she presented the following appearances:—Pulse about 100, not very small; skin hot and dry; tongue furred in the centre and slightly reddened at the edges and on the tip. Patient seemed to be in great pain; abdomen tympanitic and tender on pressure. Having ascertained that her bowels had not been opened for three days, Dr. Green administered copious enemata, and gave internally the following: Jalap Pulv. Hydg. C. mit. *aa.* gr. x.; this was repeated in two hours, the first having no effect. Pulv. opii gr. ss. was added to the above prescription the second time.

On Monday morning, June 2d, I saw Ellen for the first time. On entering the ward, I was struck with her appearance, her face giving evidence of extreme suffering. She complained of the violence of the pain in the abdomen, which after a careful examination I found to be seated in or near the transverse colon. Both this portion and the ascending and descending colon appeared hard and filled with impacted fæces. The abdomen was exceedingly tympanitic, but the extreme sensibility seemed confined to the region of the transverse colon. The pulse was about 100 and not very small; tongue slightly furred in the centre and red on the end and edges; papillæ slightly elevated; skin dry and harsh. The pain is paroxysmal, and she has intervals of almost entire relaxation from suffering, lasting from two to five minutes. Previous to the accession of pain, by placing the hand on the abdomen, we could feel the contractions of the abdominal muscles commencing, resembling very much the impression conveyed by placing the hand over the uterus in the first stage of labor. She vomited occasionally during her pains, a bilious-

looking fluid, presenting nothing peculiar in its characters. Secretion of urine normal; no passage from the bowels.

I ordered cut cups over the abdomen, to be followed by a constant application of warm fomentations, the repetition of the enemata and pill; if these failed, the following: Hydg. C. mit. gr. v., Ol. Tiglii gtt. j., Opii Pulv. gr. j. M. in pilul. No. 1; if this did not produce the desired effect, to be repeated in three hours. She passed an uncomfortable day and night, her medicine having no effect, and the pain still retaining its paroxysmal character.

Tuesday morning, pulse the same as yesterday; skin jaundiced; no change in the tongue or skin; pain still continues; no passage from the bowels, but a profuse vomiting of fæcal matter took place this morning, whilst upon the close stool, passing an injection. I examined the abdomen carefully, and could not detect any hernia; abdomen still tympanitic, but not quite as tense or as tender as yesterday. She converses readily and seems quite easy during her intervals of pain; tongue natural, slightly furred in the centre; no appearance in the face of strangulation or invagination of the intestine, and if it had not been for the vomiting of fæcal matter, I would have unhesitatingly pronounced her something better. During all this time she complained of thirst, and was allowed lumps of ice.

Finding that the purgatives had no effect, I resolved to place her upon calomel and opium. I ordered, therefore, the following: Hydg. C. mit. gr. j., Dov. Pulv. gr. iv. q. h. 2, and a warm bath, to be followed up by warm fomentations.

Saw her Tuesday evening. Seems a good deal better, though still some pain; abdomen much relaxed since morning; vomiting ceased; pulse diminished in frequency; skin more moist; she seems quite cheerful and disposed to sleep. After an enema in the afternoon, passed a few scyballæ of a dark green color, but as yet no evacuation. I ordered an enema of castor oil f℥j, Croton oil gtt. ij, to be given at once, and the calomel and Dover's powder continued.

Wednesday morning. Found my patient much better; jaundiced hue of skin increased. She had passed a comfortable night; no vomiting; pain almost relieved, only a slight tenderness remaining over abdomen, which is entirely relaxed; had a profuse evacuation from the bowels, which consisted of a large mass of hardened scyballæ; urine free; pulse and tongue natural.

As she had some slight pain, I ordered her small doses of the solution of morphia, and an ordinary enema to be given.

Thursday morning. Ellen passed an excellent night; is quite cheerful; complains of a slight burning over the stomach; bowels open, stool natural, some pain in the uterine region; her period had arrived and she was menstruating. As she told me that she always suffered from dysmenorrhœa, I ordered a pill composed of 3 grs., of camphor and ½ gr. of opium every two hours. She was permitted to get up, and I left her considering her convalescent.

All Thursday she seemed to improve; walked about the ward; seemed very cheerful. In the afternoon, whilst walking up the ward, she complained of sudden blindness and immediately expired.

Post mortem.—Heart and lungs perfectly healthy. Liver slightly enlarged. Gall bladder very much distended with bile. Large intestine perfectly healthy, save for two inches near the junction with ileum, where it presents a very dark appearance. The mucous membrane highly injected. The whole of the small intestines were of a dark mahogany color, and gave every indication of having been subjected to strangulation. About two inches above the ileo-cœcal valve I found a band constricting in such a manner as to include about eighteen inches of ileum. This band has a perfectly free border, and presents no indication of a rupture. It is twisted upon itself like a cord. The intestine is also twisted upon itself at this point. There is a small perforation in the ileum on the lower side of this band. It would seem as if the band had existed for a long time, and the constriction of the intestine had been caused by the twisting of this band upon itself. There was no effusion within the cavity of the peritoneum. The ileum around the perforation for about half an inch in circumference was much thinned, entirely denuded of its mucous coat, and appeared on the eve of perforation.

Remarks.—The above case presents some points of deep interest. The pain had ceased. A return of fæcal evacuations—and, in fine, the physique and morale of the patient afforded us every indication of perfect convalescence. And yet, without any of the prodromes of perforation, without any effusion in the cavity of the abdomen—the patient, as it were, in perfect convalescence—perishes from a disease which was stealthily pro-

gressing, without giving any manifestation of its onward course. We are at a loss to account for the suddenness of the death in any other manner, than by a powerful shock upon the great nervous centres, arresting the action of the heart. K.

Surgical Wards of St. Joseph's Hospital, from May 1st to July 18th.—Service of DR. J. H. B. MCCLELLAN. Reported by R. DURNEY, M. D., Resident Physician.

Disease.	Cured.	Relieved.	Died.	Removed.	Remaining.	Total
Abscess, mammary	1	0	0	0	0	1
Anchylosis of ankle-joint	0	1	0	0	0	1
" knee "	0	1	0	0	0	1
Artificial anus	0	0	1	0	0	1
Burns	5	0	0	3	0	8
Caries of phalanges	0	0	0	0	1	1
" keee-joint	0	0	0	1	0	1
" metacarpal bones	0	0	0	1	0	1
" metatarsal "	1	0	0	0	0	1
Contusion of hip and thigh	0	0	0	0	2	2
Conjunctivitis	1	0	0	0	0	1
Fractures, simple, 13, viz.:						
Arm	1	0	0	0	0	1
Clavicle	1	0	0	1	2	4
Crest of ileum	1	0	0	0	0	1
Condyle of humerus	1	0	0	0	0	1
Neck " "	0	0	0	1	0	1
Leg	0	0	0	0	1	1
Nasal bones	1	0	0	0	0	1
Forearm	1	0	0	0	0	1
Femur	1	0	0	0	0	1
Spine	0	0	0	0	1	1
Fractures, compound, 4, viz.:						
Foot	0	0	0	0	1	1
Leg	0	0	1	0	1	2
Comp. comminuted of forearm	0	0	0	0	1	1
Fracture, ununited, of leg	1	0	0	0	0	1
Fistula in ano	4	0	0	0	0	4
" in perineo	0	0	0	1	0	0
Gonorrhœa	3	0	0	0	0	3
Hydrops articuli of knee	0	1	0	0	0	1
Paralysis of bladder	1	0	0	0	0	1
Paronychia	2	0	0	1	0	3
Scirrhus testis	1	0	0	0	0	1
Sprains	2	0	0	0	0	2
Ulcers	1	0	0	0	0	1
Wounds, simple:						
Radial artery	1	0	0	0	0	1
Palmar arch	0	0	0	0	1	1
Scalp, lacerated	2	0	0	0	2	4
Foot, "	0	0	0	0	2	2
Hand, "	1	0	0	0	0	1
Eye	1	0	0	0	1	2
	34	3	2	9	16	64

In two of the cases of compound fracture, amputation was found necessary. In one of these—that of a compound fracture of one leg with comminuted fracture of the other limb, from a railroad accident—it was performed on the sixteenth day after admission, in consequence of mortification having taken place. The patient died on the twenty-eighth day with sloughing of the stump. In the other case—a compound and comminuted fracture of the forearm, in which the hand and both bones were completely crushed by being caught in the machinery of a cotton factory—it was performed immediately after reaction, and the patient is now doing well.

The case of ununited fracture of both bones of the leg, was cured simply by the support of splints and bandages steadily continued for a long time. This treatment was adopted at the previous term by Dr. Horner, and was continued in this with complete success.

The case of artificial anus was the result of an operation for strangulated hernia, performed in the city some months previous. The parts around the orifice, which was of considerable size, were very much thickened and indurated; and every effort made to accomplish a cure without resorting to an operation, was without the slightest effect. Fæces were constantly discharging through the wound, and could not be retained or suppressed by any bandage or appliance whatever. The skin for some distance around the orifice became excoriated and tender, and the patient rapidly declining in health, it was determined to perform Dr. Physick's operation, with the hope of affording relief. This operation was performed by dilating the wound or external orifice, so as to apply a ligature to the deeply-seated gut. Owing to the induration of the tissues, and the alteration from the normal condition of the parts, this required considerable care, notwithstanding which the epigastric artery was divided. It was, however, promptly and with little difficulty secured, with very little loss of blood. A ligature was then applied, attached to a curved needle by means of Physick's forceps, through the septum, dividing the double gun-barrel-like orifices of the bowel. The case did not progress favorably after the operation. For about twenty-four hours the patient was apparently doing well, but she gradually became weaker and weaker, and finally exhibiting the

characteristic symptoms of peritonitis, died on the sixth day after the operation. On a post mortem examination, the ligature was found in the proper situation, about a quarter to half an inch from the external margin of the septum, and adhesion had already taken place between its layers. The bowels were found to be inflamed some distance both above and below the seat of the operation, with extensive adhesions between their folds.

CLINICAL REPORTS.

Clinic of Jefferson Medical College.—Service of Profs. MÜTTER and PANCOAST. Reported by G. R. Morehouse, M.D.

Clinic of February 15, 1851.

Cases presented this day:—Luscitas; oscillation of the eye-ball; ophthalmia neonatorum; tendinous paronychia; caries of the tibia; two cases of strabismus, (convergens and divergens); hæmorrhoids; chronic inflammation of ligaments of the ankle; cystic goitre; extensive laceration of the hand; osteo-sarcoma of fibula; aneurism by anastomosis; epulis; varicocele; cataract; tertiary syphilis; abscess under the biceps flexor cubiti; glaucoma; caries of of the vomer; granular conjunctivitis; fungus hæmatodes of the eye; encanthis; necrosis of the femur; erysipelas; onyx; functional derangement of the cerebellum; caries of spine; varicose veins of leg; amaurosis. Total 30.

The following cases, after the clinical remarks as given below, were operated upon before the class by Professor Pancoast.

Case 1st. Cystic Goitre.—John Flinn, aet. 42, originally from the limestone region of this State, has, for some time past, been troubled with hypertrophy of the thyroid Gland. From the account he gives us, we gather this history of his case.

Before being subjected to any treatment, the tumor presented the usual appearance of goitre—a soft, painless, elastic swelling,

occupying the position of the thyroid gland, of moderate bulk, and devoid of any signs of acute inflammation. Disliking the deformity, however, and dreading its further growth, the patient sought medical aid. He was placed for a long time under the internal and local use of iodine, which did not act so beneficially in this case as it is wont to do; the tumor seemed at first somewhat diminished, but it soon began to increase anew, and became firmer and harder. The skin covering the tumor became so red and tender under the use of the local application, that his physician deemed it advisable to discontinue the remedy. The burnt sponge was not used in this case, which I believe even more efficacious than the iodine, nor was any local depletion made, which it seems to me was indicated by the unusual inflammatory character of the case, as evinced by the rapidly increasing redness and hardness.

As it presents itself now, the edges of the tumor are strongly defined, both lateral lobes are very prominent, hard, and firmly adherent to the skin, which is red, shining, and extremely sensitive to the touch. In the isthmus, which is nearly as broad as the gland, there is a round fluctuating tumor, near the top of the sternum, about the diameter of a dollar, evidently a cyst developed in the tissue of the gland. The patient suffers greatly, respiration is seriously interfered with by the pressure of the enlarged and hardened mass upon the trachea, the return of the blood from the head by the veins is impeded from the same cause, producing a fulness of the vessels of the face and neck, and giving the patient a dark, puffy countenance, as of a man half-strangled. I look upon this case, as one of the most serious character. The excessive hardness of the mass, and the close adherence to it of the sensitive and violaceous skin, unusual circumstances in goitre, lead me to fear the disease is of malignant character, and to form an unfavorable prognosis—for cancer of the thyroid gland, though very rare, is sometimes met with. What can we do for the patient? The extirpation of the gland entire, a thing, many times attempted, sometimes done, is not to be thought of. It would be accompanied with such imminent risk to life, that no judicious surgeon, even in a case much more favorable than this, would attempt it.

To cut down and tie the superior thyroid arteries, an uncer-

tain remedy at best, though not difficult in ordinary cases, is nearly impracticable here, from the size and unyielding character of the tumor. I believe, therefore, we must rely upon local depletion, and the use of an alterative pill internally, consisting of a half grain of the protiodide of mercury; two grains of gum guiac., and a third of a grain of opium, three times a day, keeping the patient quiet, and giving him a well regulated regimen. The cyst at the furca of the sternum, which is a very sensitive point, seems to press upon the trachea and must be otherwise disposed of. The cystic tumors of a goitre, require and justify some operative measure. Though they may have obtained considerable size, they have originally sprung from the cellular spaces of the gland that have undergone great enlargement, and may therefore be attacked with much more safety than a solid growth in the organ, which would be found more vascular. They may be treated with a seton, as we treat hydrocele of the scrotum and neck. This I have several times done with success, but it is attended with considerable risk, from the constitutional irritation it excites, and from the purulent absorption which may follow, both of which have occasioned death. They have been injected with iodine, but this is more hazardous still, and as erysipelas is very liable to follow, few surgeons would repeat the experiment. Prof. Porta, of Padua, in Italy, has proposed in a recent work, to dissect out these cysts. This, which at first view, would seem a very hazardous proceeding, from the very vascular character of this blood-gland, is really, a most judicious suggestion. For the cyst, you must recollect, springs from a small origin, and is really, rather a new development in, than a part of the proper structure of the gland.

I have recently put this suggestion in practice and succeeded in effecting, what I believe to be a final cure of a large goitre, in a young lady of this city. The enlargement in this case was principally confined to the right side of the gland, and was of several years standing. In the first instance, it was a solid tumor, accompanied with great anemia, a rapid fluttering pulse, and protrusion of the eye balls. By a varied course of medical treatment extending through eighteen months, I was enabled to overcome these latter symptoms, and greatly reduce the size of the gland. Then followed a cystic tumor, in the same position as

the one in the case before us. This I finally obliterated by passing a seton through it, which I kept in for several months. Before the ribbon was withdrawn, another cyst was developed near the top part of the right thyroid lobe, which grew uninfluenced by any treatment I applied, till it reached the size of a pullet's egg. From its high position in the neck, the deformity was so conspicuous, that its removal in some manner was earnestly desired by the patient and her friends. I determined on reflection to attempt its extirpation after the plan of Professor Porta, for I deemed this, if cautiously done, not attended with greater risk than the use of the seton, which in the treatment of the former tumor had caused great constitutional irritation. If I could not remove the cyst entirely without provoking dangerous hæmorrhage, I determined, after laying it bare, to cut away a portion of its walls, and dress it from the bottom with lint. With the assistance of Dr. Ellerslie Wallace, I performed the operation in this way. I first made a free vertical cut through the skin, over the longitudinal axis of the tumor. I next cautiously divided the fasciæ and the platysma muscle, which was very red, thick and vascular, over a grooved director. The tumor thus exposed, presented a blue or livid appearance, from the coagulated blood with which it was filled within. I opened the cellular tissue over the top of the gland, and with a blunt strabismus hook, drew out and tied the superior thyroid artery, which was of large size. At the outer edge of the gland, and about its middle, I found a strong pulsating branch coming up from the inferior thyroid. This likewise I isolated and tied. I next proceeded to the sepation of the cyst, grasping it with the forceps, and working it loose at its circumference from the body of the gland with the handle of the scalpel. I found its attachments very feeble, little or no stronger than those of the follicular tumors of the scalp, which you have so often seen Dr. Mütter and myself turn out in this arena. Under the grasp of the forceps the walls of the cyst gave way, and its contents were discharged. The sac collapsed a little, and I finished by detaching the tumor, otherwise entire, from its bed in the gland, with the finger nail. A little arterial bleeding followed, from the bottom of the deep hole left in the gland. By introducing two tenacula at right angles with each other, and throwing a ligature around them, this was at once

suppressed. One or two other minute arterial twigs were tied in the substance of the platysma muscle. Very little blood was lost. The wound was lightly dressed; some suppuration followed, but in the course of three weeks, the cicatrization was complete. If no other tumours should follow, the patient will escape with only the marks of the incision, and a thyroid gland a little fuller than natural, for I believe when once greatly hypertrophied, this organ seldom, under any treatment, goes down to its normal size. If cysts should form subsequently in other parts of the gland, I would most certainly endeavor to remove them by the same process. This is, so far as I know, the only instance of a dissection of a cyst from the thyroid made in this country. But it has been repeatedly done by Professor Porta, and others in Italy, and the operation though requiring great caution, and knowledge of the structure on the part of the operator, is not difficult. In the case before us to-day, I would not however venture upon the operation. The prospect of a cure, is, I believe under any plan uncertain. I shall therefore merely lay open the cyst by an incision, and discharge its contents, so as to relieve the pressure on the trachea. I will then fill the cavity lightly with lint, and when the bleeding ceases poultice it, in order to promote suppuration and granulation. I treated successfully, about three years ago, a similar case in this place, after this manner, though I was then compelled to make repeated application of the vegetable caustic, to destroy fungous growths from the part. The cyst was opened, and its contents of coagulated blood, pus and serum evacuated. Its lining membrane was found studded with soft fungous excrescences, nearly filling its cavity. A dossel of lint was placed in the wound to check the bleeding, retained by a strip of adhesive plaster.*

Case 2d. Paronychia.—Rosanna Gillespie, æt. 39, presents herself with the worst form of whitlow, arising from a punctured wound of the finger. Cases of this sort are common occurrences,

*The result in this case seems likely to verify the unfavorable opinion of it above expressed. The patient experienced considerable immediate relief from the operation, as the tumor was much diminished and the breathing easier. But when last seen, some three months afterwards, a fungous growth of bad appearance had sprouted from the suppurating wound, for which a chloride of zinc paste was ordered.

and, therefore, more important to you, inasmuch as they will meet you at your first entrance into practice, and, if not properly managed, may terminate seriously, either by the loss of the finger, hand, or arm; or even of life itself, when the absorbents become extensively involved. In the present case the first stage has hardly passed; matter has formed beneath the vaginal ligaments and within the tendinous sheath of the finger, and has extended itself into the sero-cellular envelopes of the tendons in the palm. The constitutional disturbance has been very great, the glands in the axilla, and along the upper margin of the clavicle, are enlarged; the hand and wrist are greatly swollen; and here and there, along the arm, can be traced the red lines of commencing angeioleucitis.

Now, gentlemen, to understand this affection thoroughly, you should comprehend the *modus agendi* by which a trifling puncture lights up so severe a malady. The first effect of the puncture is inflammation with throbbing, which, if the puncture is not deep, is seated merely beneath the skin, but is exquisitely painful, from the number of nervous fibrils, pacinian bodies, and papillæ spread over the finger. The skin, from the thickness of the cuticle in this position, does not yield readily to distension, hence a lye poultice, by softening the cuticle, often tends, in the early stage, to assuage the pain. Sooner or later, if not arrested, the inflammation extends itself beneath the vaginal ligaments, involving the double synovial sheaths and trabecular threads of the tendons. The ligaments possessing no elasticity, do not yield to the increasing bulk of the inflamed tissue beneath; strangulation is therefore produced, and we have, as a consequence, sloughing of the tendinous sheaths, and of the periosteum lining the bottom of the vaginal grooves, with subsequent death of the phalanges. This constitutes a felon, in common language. But the disease, though compressed laterally, extends itself readily enough upwards into the palm, following in the sheath of one finger up into the common sero-cellular envelope of all the tendons of the hand and wrist. These parts swell enormously, and in this state are compressed by the bones on the one hand and the palmar fascia and the annular ligament on the other, producing agonizing suffering, and rendering tetanus liable, from strangulating pressure upon the nerves. The confined inflamma-

tion in the centre of the palm is now disposed to extend itself down the thecal bursæ of the other fingers and thumb, and along the tendons of the flexor muscles, high up the forearm; and in two instances, I have seen it spread over the bellies of the muscles, and finally destroy the ligaments of the elbow joint, and the interosseous ligament of the forearm. Under such circumstances the life of the patient is in great danger, and there is imminent risk of mortification of the hand and arm. Now, how are we to arrest all these terrible consequences, for, to some extent, they will surely follow in the case before us, if relief is not afforded.

The first, and most obvious, indication to be fulfilled, is the relief of the strangulation. This is to be done by entering the curved sharp-pointed bistoury, vertically through the skin, down through the vaginal ligaments, to the flexor tendons. Then bring the bistoury, with the back toward the palm, and let the point slide under the ligament, in the direction of the end of the finger, and then out through the skin. Let the incision extend the length of one phalanx; if it were made the whole length of the finger, the tendons would start out from the sheath. If more than one opening on the finger is required, it is best to make a separate puncture over another phalanx.

In this case, I make a free opening over the first phalanx of the second and third fingers, which particularly suffer. A considerable amount of pus escapes, as you see, and I am able to press more from the palm of the hand, rendering it clear to you that I have cut into the bursal sheaths of the tendons. Still the general purulent mass, which has collected in the palm, may not be sufficiently well discharged from these incisions, as we know the thecal bursæ are not open channels, but have here and there septal attachments, which connect them to the tendons. How, then, if this should follow, are we to free the palm? Lay it open as we have done the fingers? No! That would effectually relieve the strangulation and let out the matter, and we all know, as in this other case of hand, with extensive laceration, which I now show you, that a violent injury of the hand, as that made by the bursting of a gun, provided it opens the palmar fascia thoroughly, does, if judiciously treated, nearly always, well. But if we were to lay open the palm, by an incision, in the subject

before us, we should inflict great pain, leave a deforming and troublesome cicatrix, which ought if possible to be avoided, and give rise to a troublesome hæmorrhage by the division of the ulnar arch, an arterial trunk which bleeds profusely when cut, but like other arteries bleeds little when violently torn. But when the middle palmar fascia becomes involved, as it sometimes does at one of its sides, so as to let a soft fluctuating tumor form in the palm, the tumor must then be opened, as the violence of the inflammation necessary to produce this result, will have effectually blocked the vessels of the part. I have a much better way, when the palmar fascia has not yielded, by which I have several times afforded complete relief in this state of the hand, without any of the undesirable results above referred to. This consists in passing a somewhat blunt pointed, curved and rather dull bistoury under the opened sheath of the tendon, from the first phalanx, whether it be finger or thumb, into the centre of the palm, and sweeping it gently round, so as to break down the inflamed synovial and cellular tissues, and furnish a free outlet for the fluids with which they are distended. Little force is given to the sweep of the bistoury, so that the tendons need not be cut. No arterial hæmorrhage will follow, for the swollen state of the hand separates the two arches—the radial arch being fixed by its perforating vessels, near the face of the metacarpal bones, and the ulnar being pushed off with the palmar fascia, laying as it does in front of the superficial flexor tendons. This I shall do, if by to-morrow I do not find the state of the palm much improved. For the present, I shall direct the hand and arm to be kept constantly sopped with a strong solution of the extract of lead and laudanum in water, and direct the patient to take the following mixture:

℞.	Aqua Camphor.	
	Sp. Mindereri ana,	f. ʒiij.
	Sp. Nitri. Dulcis,	f. ʒss.
	Morph. Acetat.	
	Ant. Tart. ana,	gr. i.
	Sac. Alb.,	ʒj.

In table-spoonful doses, every hour, for the purpose of quieting nervous irritation, giving the patient sleep, and reducing the

fever by exciting free perspiration. If perspiration does not follow after the third dose, I would slightly increase the proportion of tart. antimony, to ward off febrile excitement. The patient, for the present, to be kept on a diet of toast and tea. The back of the same fingers, as well as the hand, is, as you see here, much swollen. This is but an extension of the disease from the palmar surface. Matter may form here, so as to render it necessary to make incisions for its exit. If it be necessary to do do this, in the back of the hand, I sometimes purposely include in the cut one of the superficial veins, in order to unload the vessels. As the disease extends round to the back of the hand, so will it sometimes invade the joints of the fingers, followed, occasionally, either by anchylosis, or the necessity of amputating the part. If the accident occur in a subject with a strong tendency to scrofula or phthisis, we may have fungous degeneration, like the white swellings of the larger joints, for we have here the same tissues to be involved. Even when neither of these cachexia are present, we sometimes have a spongy, fungous state of the tendinous sheaths, that we have to correct by touching lightly with caustic potash.

Still, under the treatment, above suggested, and which I have found, of all others, the most reliable in these cases, I have no doubt the patient will do well. There may remain a permanent stiffness of one of the fingers, if there be great injury to the tendons where they pass each other, but I feel very confident, that not only the patient's life, but her hand will be saved.

Cases 3 *and* 4. *Strabismus, (convergens and divergens.)*—We next have presented two cases of Strabismus, one female and one male, both adults—and both cases of double squint. In the former we have the internal or common form of the affection, strabismus convergens. In the other, we have the external squint, or strabismus divergens; a variety which I believe does not occur more than four or five times in a hundred cases of this deformity. This, from its comparative rarity, is a much more unpleasing affection than the internal variety; both eyes look outward like those of the bullock, and hence we have the term bull-eyed, applied by the vulgar to persons thus afflicted. You have seen me already operate, many times, for strabismus,

during the session, and are familiar with the mode which I practise. I shall proceed to correct the deformity in both these cases to-day, and will take this occasion to enter briefly, though somewhat more fully than I have hitherto done, into the principles involved, and the rules by which I am guided in the operation. I do this the more willingly, because I think they are not so well understood generally as they should be, and because, from the imperfect success of the operation in the hands of many surgeons, there is a sort of general opinion in the profession out of the large cities, that the operation for strabismus has, in a great measure, been abandoned. Now, there is nothing more untrue than this.

I was among the earliest in the country to operate for this deformity, after the news of Dieffenbach's successes, in 1839, had reached us. I have continued to operate from that time to the present, and have certainly, in all, performed something like a thousand operations, and in patients of almost all ages between 5 and 60; and my most deliberate conviction is, that there is no operation in surgery that yields (when rightly managed) more gratifying results. It is one of the very few in which I feel inclined to promise a perfect cure, provided the patient will yield obedience to my after treatment. Too many are apt to believe that the whole of the operation consists merely in cutting a tendon. That any one can do; but it is a small part of what we have to attend to.. The character of the operation has to vary with nearly every case.

Much more time would be required than we can possibly spare to-day, as there are some other patients to be attended to, were I to undertake to cover the whole ground of necessary instruction. I will do the best I can by laying down some rules.

We must first start with a proper knowledge of the cause of the deformity. This consists in a disproportionate unrelaxing or spastic contraction of one of the straight muscles of the eyeball, when compared with its antagonist on the other side of the ball. This may be, and very commonly is in the first instance, confined to one eye, but as it destroys the parallelism in the axis of vision of the two organs, the other eye is sooner or later, and to more or less extent, made, sympathetically, to assume the same kind of distortion. The exact cause of the too forcible

or unyielding contraction of one muscle is various. It seems to arise, occasionally, from the mere habit of imitation; by too exclusively keeping the eye fixed on near objects; from the forceful pressure of the finger against one ball, for the amusement of making objects look double; from the growth of a tumor, which prevents the eye from turning properly; and from a variety of like varying causes. But by far the most common of all, is the disturbance of the centric extremities of the nerves of the straight muscles by some congestion or inflammation of the meninges or substance of the brain, which so often occurs in scarlatina, measles, hooping cough, or cerebral fever. The result of this disturbance as the cause of squint, has been long known to the profession, but it was taught, and even so lately as in the last surgical lectures of Sir C. Bell, to be due to the paralysis of one muscle, and not to the over stimulation of its antagonist. This error in pathology fettered the hand of the surgeon, for over a paralytic muscle he had little means of control. Stromeyer and Dieffenbach showed as the general rule, the incorrectness of the opinion.

I see cases occasionally, in which the form of strabismus, (the divergent) as shown in this case, appears to be produced by a congestion of the cavernous sinus, through which runs, as you know, the nerves to the muscles of the eyeball, and with the internal wall of which the sixth pair of nerves is intimately connected. I have been several times consulted by patients, so far as I recollect all adults, for relief from a double vision, steadily increasing and of recent occurrence. In all these cases the squint was external, and was accompanied with a sort of amblyopic dulness of vision, undefined pain in the region of the head, increased intolerably by exposure to our summer sun, with more or less constipation and irregularity of the bowels. I have not, of course, any positive proof of the correctness of the pathology, but I have thought that this state of things was dependent upon a congestion of the choroid veins of the eye, and the cavernous sinus, accompanied by a sluggish circulation in the portal venous system, with which the German ophthalmologists teach that the choroid veins so directly sympathize.

Be that as it may, I have always been able to relieve these cases when recent, (and last winter I had an opportunity of

showing the fact in this clinic,) by repeated alternate cupping and blistering to the back of the neck and temple, occasional thorough purging with blue mass and comp. ext. of colocynth, and giving daily douches of cold water to the head while the patient was resting up to the knees in hot water. If this affection, however, is not seen in its early state, I believe it is not possible to afford relief, except by dividing the tendon of the muscle, (the external rectus) which has undergone the spastic or unrelaxing contraction.

I will now in this case of internal squint, make the preparatory investigation necessary to the operation.

I first wish to determine if this is double, and if so, if the distortion is equal in both eyes. To do this accurately is difficult, for the patient can direct either eye at will straight towards an object, and the whole obliquity of both eyes will seem accumulated in one. The mode to which I resort, to determine this, in all forms of squint, is the following: I place myself in front of the patient, and direct him to roll the eyes as far as possible, alternately to the right and left. Now a person at middle age, with healthy eyes, can hide the white completely at the outer canthus and slightly bury the edge of the cornea at the inner. A young subject in which the tissues are always more yielding, can do more than this. If I find after repeated trials of this sort, that the movements of one eye are normal, and that in the other the cornea is buried too deeply in the inner canthus, and that a strip of the adnata, a sixth or an eighth of an inch, is left uncovered at the outer, then, I say the internal rectus of this eye is alone at fault, and its tendon must be divided.

We will also frequently observe in the faulty muscle, an involuntary and rapid twitching when the eye is turned strongly in the opposite direction. If, at the same time, I find that the eye at fault pretty generally rolls upwards and inwards, or downwards and inwards, I say, that a portion of the upper or lower rectus muscle is likewise concerned in the deformity, and may, after the operation on the internal rectus, require to have its tendon cut, and I locate my incision through the conjunctiva to suit.

I next observe carefully when the patient is making no unusual effort with the eyes, whether the lids open equally wide, or, in other words, if there is not a larger disk covered at the upper

part of the cornea in one eye than the other. If so, I am sure that the eye that has the cornea most covered, is the one which has the shortened muscle and the squint, for the effect of the strabismic contraction is to sink the ball and leave the lids less widely separated. By applying these tests, we may find both eyes equally affected with strabismus, or affected in different degrees, and we must plan our operations accordingly. Here comes into requisition the judgment and skill of the operator, for the nice point to determine is, which tendon, and how far, he is to cut—for a wrong incision often leaves a deformity which it is hard to correct. By a close attention to these rules, one surgeon will be almost invariably successful, and another of equal, or even greater merits in other respects, will without it be occasionally very unfortunate.

If it be a clearly marked case of single squint, the course is plain; you have but the one eye to act upon, and you divide the conjunctiva over the insertion of the tendon, raise the tendon with the blunt hook and divide it neatly with the scissors near the sclerotic coat, so as to leave no protruding stump to the tendon. If the squint has been at the same time a little upwards or downwards, you must dilate the intermuscular fascia by a section in one of those directions. If after this the eye does not come straight, you should, provided it remains a little sunken, divide a portion of the superior or inferior rectus. But if the eye, without becoming straight, is a little more or equally prominent with the other, withhold the division of these muscles, for if you cut them you weaken the stays of the ball, and you will have the eye, though it may be straight, probably prominent and protruding—a result which has been too frequently produced by an attempt to cure a double squint, in the mistaken belief that one eye only was at fault, and which is the main cause that the operation has fallen into discredit with those who have witnessed such mishaps. You have now a squint in the other eye, and to that you must turn your attention. It cannot be very great, or you would have discovered it by the preparatory tests to which I have alluded. You have therefore to divide the corresponding tendon in the opposite eye, and this may be done in the *adult*, at the same sitting. It must, however, be done with caution. You have to cut the tendon of the internal rectus com-

pletely, or you gain nothing, for if a few fibres be left it will keep up its disturbing action on the ball. But you should not cut any portion of the intermuscular fascia, and ought to weaken as little as possible, the retaining force of the conjunctiva. Your object is to straighten the direction of this ball, without causing it sensibly to protrude.

For this purpose the sub-conjunctival operation of Guèrin, is the most appropriate, in which we make a puncture, and divide the tendon with this crooked knife beneath the surface, as in the subcutaneous process upon the tendons about the joints. Or wanting this instrument, it answers nearly as well, to make a horizontal incision of the conjunctiva, raise the tendon between the lips, and divide it with the knife or scissors under the edge of the membrane.

I have here stated one of the ordinary difficulties that occur in the operation, and the mode in which you may effect a perfect cure without causing in either eye a prominence beyond the other. We will very frequently have a double squint, so strongly and clearly expressed, that it will be best for us to act at once on each eye with the common vertical cut of the conjunctiva, limiting ourselves at first, however, to the division of the single tendon merely on each eye. After this is done, we then apply the preparatory tests above noticed, and see which eye requires, in order to bring both parallel and with an equal degree of prominence, to have the intermuscular fascia dilated upwards or downwards, or one of the adjoining straight muscles either partially or in extreme cases entirely cut. These incisions have frequently to be made upon both eyes, especially in cases of long standing, but not usually to an equal extent.

I have spoken of the operation as yet in reference to adults, and in cases of internal squint. The same remarks will apply to the operation for external strabismus, which is easier of performance, as the tendon on that side is uncovered for a longer space, and we have no plica semilunaris as at the inner canthus, into which or even immediately adjoining which, we are never to cut. Notwithstanding this, the cure of the external squint does not appear to me to be quite so easily, or so readily made, as that of the internal, and the cause of this appears to me to have been in some cases owing to an attendant paralytic weakness of the internal rectus muscle.

If you are treating young subjects, (and under 10 years of age I would not advise you to undertake the operation, though there may be very properly exceptions made to this rule,) you must be much more guarded in respect to the extent of your sections. For in young persons, the overstretched muscles have much greater recuperative energy, and this gradual increase of their power, seems extended over several days. The evil to be feared then is, that the muscle antagonising the one cut, will pull the ball so far over as to let the divided tendon become reattached too far back on the globe. There are, therefore, few cases in persons under puberty even of double squint, in which I should deem it judicious to operate on both eyes at one sitting. I would advise you to cut the tendon, and that merely on the eye most distorted, at the first sitting, and wait for for a few days or a fortnight, or even months in some cases, in order to ascertain fully what effect will be produced. It will then be found sometimes necessary to divide the tendon of the contracted muscle, on the opposite side. But in children you must always remember to make allowance for this recuperative force of the muscles, and not seek to make the eyes immediately straight. The proper degree of allowance to make, is one of the difficulties of this operation, which has to be graded by the judgment of the operator, according to the age of the patient, and the degree of the deformity.

It is true, in case an external squint should follow an operation for one of the opposite kind, you have it in your power to correct it by a subsequent division of the external rectus tendons, yet it is a most unpleasant result, which you ought, and may most usually avoid. One mode to which, when I particularly fear such a result, I have recourse, is, to stop considerably short of making the eyes straight, to reintroduce subsequently my blunt hook so as to loosen the reattaching tendon and nick the fascia above or below very cautiously with the scissors without enlarging the wound in the conjunctiva, until the balls begin to assume their proper positions.

In persons at, or past the middle period of life, we need have no fear of such a result, and the eyes should be made fully straight at the first sitting. I have operated in one case of unusual interest—a Mr. Samuel Solomons, near 60 years old, a patient of Dr. Mœhring's of this city. This man was partially

amaurotic, and had so extreme an internal squint, that both corneæ were held hidden, save a small disk at the outer margin, in the internal canthi. The sight in one eye being a little better than the other, I selected it for an operation. By grasping the conjunctiva (which was red as scarlet, from its being always exposed) at the outer border of the cornea, and making traction upon it with the forceps, so as to be able to get a hook upon the inner side of the cornea, I managed to divide the internal rectus, the superior rectus and a portion of the inferior, with the intervening fascia, so as to get the cornea nearly round to the front of the orbit. By this means I was enabled to render the sight which had before been nearly useless, in a considerable degree serviceable to the patient. I mention this fact, as a striking illustration of the difference in density and resistance between the same structures at the opposite extremes of life. I have met with cases, however, even in young subjects, where the fascia and cellular structure at the inner canthus have been hardened by chronic inflammation, as when a wound has been inflicted or a carious bone detached, that rendered necessary a free dissection of the ball on one side, before the eye could be pulled straight by the antagonising muscles. But these are exceptional cases.

I have not in these remarks, spoken of any operation upon the oblique muscles, which we were at one time directed by many writers to cut in strabismus. The division of these muscles, is, at least in all ordinary cases, unnecessary, as I believe they are never directly concerned in the production of strabismus. I have several times divided them, in my early experience with this operation, without the slightest change in the ordinary movements of the ball. In two instances only was the division of the tendon of the superior oblique, attended with manifest advantage. In those cases, after having cut the internal rectus tendon, and dilated the fascia above and below, I found the ball held by some cellular tissue, in the direction of the superior oblique tendon. I drew this tendon out from the wound made through the conjunctiva, and divided it. It separated with a snap, and the hardened bands of cellular tissue, which had been held tense by it, were at once released, and the eye took its proper position in the orbit.

The operations were then performed on both patients in the manner above described, and with the usual successful result.

Two other operations were then practised, one for oscillation of the eye ball, and one for the radical cure of varicocele, but for want of time Prof. P. has deferred his explanatory remarks till another clinical occasion.

BIBLIOGRAPHICAL NOTICES.

Principles of Physiology, General and Comparative. With three hundred and twenty-one wood engravings. By WILLIAM B. CARPENTER, F. R. S., F. G. S., Examiner in Physiology and Comparative Anatomy in the University of London, Professor of Medical Jurisprudence in University College, &c. &c. *Third Edition.* 8vo. pp. 1098. Blanchard & Lea. Philadelphia: 1851.

It is pleasing to observe the degree of attention, that is now paid to a department of medical science, which is most assuredly the great foundation for all pathological reasoning. The day has passed when it was necessary to urge the claims of physiology to the attention of every physician. So intimately is it associated with histology, that, although the latter is undoubtedly a branch of anatomy, being nothing more than the minute anatomy of the tissues, it is customary to develope it to a greater extent in treatises on physiology than in those of anatomy. Of late, indeed, we have had excellent works—those of Gerlach, Hassall and others, for example, and the admirable unfinished treatise on Microscopical Anatomy by Kölliker—which are specially devoted to histology, and have added greatly to our knowledge in this direction. Anatomy is far from what it was at the beginning of this century, at the period when Bichat closed his distinguished career. The anatomy of the tissues was cultivated under the name of General Anatomy, but the microscrope had not then rendered such essential service; and organic chemistry, which has shed so much light on histology, was alto-

gether in its infancy. Now, it has experienced such development, that to become acquainted with the new terms which have been introduced to designate successive discoveries, is a work of Herculean—almost hopeless—labor. What would the Cavendishes and the Lavoisiers understand by Allantoin, Alloxan, Parabanic acid, Thionuric acid, Uramile, Alloxantine, Murexide and Murexan? And these only so many results of the oxidation of uric acid. The boundaries of science in all its departments have, indeed, since their time, been largely extended. It is astounding to reflect on the wonderful discoveries which have burst upon us within the present century. Physical science in no like space of time has been so much illustrated; and it has always happened, that the medical sciences have advanced along with it, but not always *passibis æquis*. That their progress should not be to the same degree is not to be wondered at; for even were we to admit, with many recent speculatists, that inorganic and organized bodies differ rather in degree than in kind, the number of efficient causes in constant operation in the latter is such as to prevent us by any mode of calculation from attaining the same certainty in our deductions, and in our estimation of the future, that we arrive at with so much surety in regard to physical phenomena. Even in certain matters that are purely physical we notice this difficulty. Undoubtedly we ought, provided we were possessed of the requisite data, to be able to prognosticate what would be the condition of the heavens as to sunshine or obscuration, at any hour to-morrow, with the same certainty as we can predict the hour at which the sun and moon will rise or set, or an eclipse obscure the face of those luminaries. Thus far, however, the data have not been attainable, and we have, at the present day, as much uncertainty in our atmospheric prognostics as in those that apply to organized bodies—animal or vegetable.

On former occasions we have noticed the enthusiasm that prevailed on the promulgation of the cell-doctrine of the formation of the tissues;—how it was believed by visionaries, that we might now obtain a knowledge of life itself; nay, that we had already arrived at such knowledge. More wise reasoners saw at once, that the "doctrine" carried us but little, or not at all, in advance of our predecessors; and when it was announced as a

physiological fact, that all tissues are built up from cells, it still remained to be shown, why those cells arranged themselves according to a definite plan, so that if we were acquainted with the origin of the parent cell, we could foretell as certainly the tissue that would be formed by it, as by knowing the animal from which an ovum had proceeded, we could say what would be the shape, size and other characters of the new being into which it would be developed. The nature of the impulse seated in the primary cell, which gives occasion to such development, has in no wise been elucidated by the discoveries of the histologist and chemist; nor have we any confidence in our ever being able to penetrate the mystery much farther.

It is not strange, however, that this apparently close approximation to the origin—if it may be so termed—of life, as exhibited in the nucleated cell, should have induced the reflecting physiologist to turn his attention more closely to what may be termed the metaphysics of biology, as exhibited in the manifestations of what Von Reichenbach terms the *biod*—the living principle or force, in other words; and to inquire into the relations between it and the physical forces. This has been ably done by the author of the work before us. As an observer every way worthy of credit; as a reasoner of high character on the results of observation, he is worthy of all commendation. Devoted to biological and physical investigations, his best energies have been directed to them; and the result has been a series of works, which have been most favorably received by the profession.

"The Principles of Physiology, general and comparative," now appears in its third edition. The first edition was issued about twelve years ago, and was the precursor of two works, more extensively known in this country, owing to their having been reprinted here,—the "Principles of Human Physiology," and the "Manual of Human Physiology;" and of a third, the "Animal Physiology," which has not been re-printed. In the volume before us he has entered into the doctrine of the mutual connection of the vital forces, and their relation to the physical; a doctrine which—he properly remarks—is more fully developed in a paper, by him, on the "Mutual Relations of the Vital and Physical Forces," in the Philosophical Transactions for 1850.

The first section of the third chapter, of the work before us,

is 'Of life, or vital activity.' In it the author properly remarks, that "the laws of vital phenomena are as open to investigation as those which comprehend the phenomena of gravity, electricity, or chemical affinity;" yet he transcends our expectations when he adds, "although the intricacy of the combinations, under which these phenomena are usually presented to our observation, renders their laws more difficult of attainment; the success which has attended the philosophical method of inquiry, of late pursued by scientific physiologists, is a most satisfactory proof that they are not beyond the reach of persevering and well-directed research." Although familiar, we believe, with every thing that has been done, of late, by the "scientific physiologist," we confess we have not been led to the same same sanguine inferences as Dr. Carpenter. His views will be best shown by the following extracts:

"Another argument for the mutual relation here contended for, is furnished by the analogy of the Forces operating in the Inorganic world. Reasons have been lately given* for the belief, that Physical Forces of every kind,—namely, Heat, Light, Electricity, Magnetism, Chemical Affinity, and that which produces or resists Motion,—are all 'correlative,' or have a relation of mutual dependence; each being capable of producing any one of the rest, either directly or through the medium of some other; and each being consequeutly producible by any of the remainder. And we may observe that this conversion of one force into another is due to its passage through some material body. Thus the Motion of a body, retarded or resisted by friction, gives rise to Heat; and conversely, heat applied to any form of matter produces its expansion, *i. e.* Motion. The friction of two dissimilar bodies produces not merely heat but Electricity; and Heat itself, when made to act on certain combinations of metals, also produces Electricity; whilst, on the other hand, the Electric current may produce Heat, Light, Magnetism, or Motion, according to the nature of the substances through which it is transmitted. Light, Heat, and Electricity, again, are closely related to Chemical Affinity, which is often specially excited by them (§ 68), and which can, in its turn, generate these Forces; a material *substratum* being required in both cases. So in the beautiful experiments by which Faraday has brought Magnetism to act upon Light, the effect is only produced when the ray is being transmitted through certain material substances.

"Now, the relation which exists among the several endowments peculiar to Organized Structures, and therefore distinguished as *Vital*, appears to be most appropriately expressed in the very same form;—they may be said to be mutually *correlated*, in such a manner that each

* See Prof. Grove on the "Correlation of Physical Forces," 1846.

can either directly or immediately produce the other. The most universal and characteristic of these forces has been shown to be that from which 'Cell-formation' proceeds; and out of this arise all the other agencies. Thus, the tissue of the Muscle is constructed solely with a view to its manifestation of contractile power; and the development of Nervous matter has reference entirely to the peculiar agencies in which it is to be concerned. The contraction of a Muscle, and the production and transmission of a Nervous impression, are phenomena of a distinctly vital character; and it will hereafter appear that, with the manifestation of the peculiar attributes of these tissues, they cease to maintain their existence as living structures,—as if the general Vital force which they previously possessed, had been expended by its conversion into the Muscular and Nervous powers. Here, too, we see that a certain material *substratum* is requisite for the conversion of one force into another; the vital force only being able to produce contractile action, by means of a certain variety of organized structure, which we term Muscle; whilst it can only develope itself as nervous agency, through that peculiar form of tissue which is called Nerve. Again, we find that the nervous force can evoke the muscular, and this in a degree proportional to the intensity of its own excitement; and nervous agency would seem capable of influencing cell-formation, in such a manner as to justify the idea that it is actually re-converted into the form of vital force concerned in it.

"If this view be considered to have a certain claim to reception as (to say the least) a probable hypothesis of the mutual relation of the various forms of Vital activity, we have next to consider whether any similar 'correlation' can be traced between the Vital and the Physical forces; since, if such can be shown to exist, the probability of the hypothesis will be greatly increased. Now, it will be shown (Sect. 3) that all Vital activity is dependent upon the constant agency of one, at least, of the Physical Forces already enumerated—viz. Heat; and that Light and Electricity, operating through Chemical Affinity, are also concerned in sustaining particular forms of it. These agents, indeed, which have long been known under the tern 'Vital Stimuli,' may perhaps be more justly considered as the real Forces concerned in the production of Vital phenomena, modified in their operation by the organized structure through which they are exerted; just as Heat becomes Electricity when it passes through a certain combination of metals. And this idea is borne out by the fact that the Vital Forces appear capable of being in their turn reconverted into the Physical: as in those numerous cases already referred to (§ 50), in which the whole energy of one set of cells is directed to the performance of some *chemical* transformation, and that of another to the production of *mechanical* movement; as well as to other instances, in which it seems nearly certain that the liberation of Electricity, and perhaps also of Heat and Light, are due to Nervous power operating through a particular structure (chap. xvii.). Indeed, when we come to consider the manifestations of Nervous agency in more detail, we shall find that it is at least as closely correlated to Elec-

tricity, as Electricity is to Light or Heat (§ 246); and the intimacy of this relationship, existing between one of the most special or peculiar of all the Vital forces and one of an exclusively Physical nature, strongly confirms the idea just expressed in regard to the mutual connection of the remainder."

All these views are ingeniously conceived, and ably expounded; yet, do they advance, in any degree, our knowledge of the intricate agency concerned in the production of the vital manifestations? The mystery of the development of the oak from the seed; and of the animal of definite size, shape, and organization from the primordial cell, remains as enigmatical as ever; and when we speak of an impulse or T r i e b seated in the ultimate nucleus of a cell, which gives occasion to cell-formation, we but employ an expression to veil our ignorance.

It is impracticable for us to give an analysis of the varied contents of this most useful volume. Its production has been a labor of love with the author; and has subjected him to much thought, and to no little toil, without the expectation of pecuniary profit. It is to be hoped, however, that so much ability, zeal and industry may meet with their reward, and that future editions may remunerate him for productive exertions, so beneficial in their results to others. It is easy for the superficial and the malevolent to carp at those who are more distinguished than they; and to animadvert on works which, like the present, profess to give a comprehensive view of the existing condition of a confessedly difficult department of science, on which numerous observers have already communicated to the world the results of their observation and reflection. Coincidence of sentiment must often be apparent; and any treatise on such a subject would be most imperfect, which should be restricted to the promulgation of the sentiments of the author, however eminent and capable he might be.

"In the selection of his materials," says Dr. Carpenter, "the Author has endeavored to avail himself of the best and most recent information he could procure upon each department of the subject; it is scarcely to be expected, however, that he should be equally well-informed upon every point; and those who have followed particular departments into detail, will doubtless find scope for criticism in what they may regard as deficiencies, or even as errors. Here, again, the Author must beg that his work may be estimated by its *general* merits; and rather by what it *does*, than by what it *does not* contain. It would have been far

easier to expand it by mere compilation to twice its present dimensions, than it has been found to press the collected materials within the space they even now occupy.

"It has been the Author's endeavor, wherever practicable, to draw the materials, both for his text and its illustrations, *direct* from original Treatises and Monographs; and thus to avoid the errors which too frequently arise from second-hand transmission. To have attempted, however, to assign each individual fact to its original discoverer, each doctrine to its first enunciator, would have at least doubled the bulk of a volume which has already far outgrown the dimensions originally intended; and while most desirous to avoid taking credit for what is not his own, the Author has felt himself compelled to limit his references, for the most part, to those *new* facts and doctrines, which cannot be yet said to have become part of the common stock of Physiological Science. The Illustrations not his own are referred to their originals, in the list at the commencement of the volume; and this list, together with the occasional foot-notes, will serve to indicate the principal sources on which the Author has relied for his information, as to those points into which he has not personally examined. From the mode in which these materials are combined and arranged, he believes that he has frequently been able to develope relations between facts and phenomena, which, in the isolated form in which they were originally stated, had only that value which all statements of truth possess; and that he has thus been able to impart to them a new and unexpected significance.

The Author thinks it but due to himself to state, that as the almost constant occupation of his time in other indispensable avocations, leaves him much less opportunity than he would desire for the prosecution of those original researches in which he feels the greatest satisfaction, so he trusts that the same plea may in some degree avail him, in regard to any deficiencies which may be found in the present work. The whole of his disposable time has been devoted to it for nearly two years, not merely without the anticipation of the slightest pecuniary reward, but under the certain loss involved in the relinquishment of other literary engagements of a remunerative character; and the sale of the entire edition will not do more than remunerate his liberal Publisher, for the very large outlay which has been incurred in the production of the work, and more especially for the beautiful series of illustrations with which it is embellished, most of them having been executed expressly for it by Mr. Bagg."

We may remark, in conclusion, that the work is beautifully gotten up in the English fashion, and that the illustrations are in the first style of art.

Spectacles; their uses and abuses in long and short-sightedness, and the pathological conditions resulting from their irrational employment. By J. SICHEL, M. D., of the Faculties of Paris and Berlin. Translated by H. W. WILLIAMS, M. D. Boston, Phillips, Samson and Co., 1850.

Mr. Sichel's work is now before the public, medical and non-medical, of the United States. We say non-medical, because we think that the work in question was intended by the author for the use of the people at large—to warn them of the extreme folly and danger of straining and destroying so all-important an organ as the eye, by delaying the use of appropriate glasses when required, or of commencing their use with those which magnify—a certain proof that they are too strong.

Now many of our non-professional acquaintances fancy they can cure consumptions, catarrhs, liver complaints, indigestions &c., &c., much more rapidly and effectually than men who have devoted their lives to such studies, but they generally admit themselves to be lamentably ignorant on the subject of their own optical apparatus; or of the meaning of the terms, Myopia, Presbyopia, Amblyopia, Kopiopia, and the like; nor can we blame them; for though such eccentricities are useful in their way, yet we think that a man enjoying any other mode of earning his bread, would be badly employed in studying them. Nor can we refrain from the expression of the opinion, that if M. Sichel did mean his book to be useful and popular with the masses, which we cannot doubt, he would better have served his purpose by simplifying his terms, so that all could have read and understood without difficulty a work in other respects perfectly free from anything bordering upon the affectation of learning,—a work full of sound philosophy, simply and clearly expressed, and full of information which every man ought to possess; for we truly believe with M. S. that even a small amount of information on the subject, by the poorer classes of society, such as mechanics, seamstresses, &c., would be the means of preventing a vast amount of uneasiness and suffering.

The work in question commences with some general remarks upon the different compass of vision in different subjects—an ex-

planation, with the derivations of, the words Myopia and Presbyopia, a statement which every body knows to be true, that the point of normal vision cannot be established with precision, because it varies infinitely in different individuals, and not only in different, but in the same individual under different circumstances, all of which is, we believe, fully admitted.

The following quotation from the author upon the subject of far and near-sightedness, is a good specimen of the manner in which he treats his subject.

"The sight of man, in a natural state, has generally a somewhat extended range; we might even say that the greater number are born with long sight, and that in his primitive condition, man is presbyopic. All travellers cite more or less astonishing instances of the extent of the power of this faculty in most savage tribes; some even deny their capability of discerning small objects placed near."

We perfectly agree with the author in considering this an absurd exaggeration; for though a savage may be chiefly employed in hunting, and his eye from habit acquire a vast power of traversing distances, yet every body in this country is perfectly aware of the equally extraordinary power of minute observation displayed by the American Indian in the pursuit of his game, or in following up the trail of an enemy. M. Sichel proceeds as follows:

"Among civilized nations primitive long-sightedness is also the general rule; and when particular tastes as, that for hunting, for travelling, especially by sea voyages solicit the frequent employment of this sense, it soon acquires a very great power. Among those who reside in the country, and devote themselves to agricultural pursuits, short sightedness is rare.

"When on the other hand, by inclination or necessity, the sight is assiduously, and from early life, exercised upon small and near objects as is almost always the case in our state of civilization, the sight forced to accommodate itself to these distances, becomes very early shortened. Even before the infant can walk, objects are given him for playthings, which he is obliged to bring near his eyes in order to see all their details. A few years later he is placed at school: there sometimes to distinguish the too small print of a book, sometimes to write in a fine character; he is forced to incline forwards towards his paper or his books. Born among the working classes, the child is none the more favored on that account in the education of this sense. As soon as may be he is placed in apprenticeship, and not only is often constrained to exercise his sight upon minute details of form, but the fatigue of his arms forces him to bring the objects yet nearer to his eyes. Habituated

continually to adjust his sight to these limited distances, he finally ends necessarily by closing the faculties of accommodation to distant objects, and becomes myopic."

All this is very true, but unless we can change the whole social system, boys must continue to learn to read and write, and eyes to be sacrificed on the shrine of necessity. Indeed, were it otherwise, M. Sichel's hobby, the spectacle, could never have have had an existence.

Upon the causes of Myopia and Presbyopia the author writes as follows:

"The immediate cause of presbytia, is, a too feeble refractive power of the transparent media of the globe of the eye, or a too short antero-posterior diameter of the organ. In these two cases rays coming from a not distant point, and being in consequence too divergent, unite too late, and form their image behind the retina. In order to concentrate them in a normal focus upon the membrane charged with the transmission of the impression to the brain, collective, that is to say convex glasses, of exactly sufficient power to supply the deficiency of refractive power in the eye become necessary. The remote causes of the insufficiency of this power are somewhat numerous; either a too slight curve of the parts constituting the dioptric apparatus, or the too small quantity of the vitreous or aqueous humors, as well as their thinner consistence; or again, an excessive muscular action are capable of destroying the normal convergence of the rays."

"The contrary is true in myopia; the refractive power of the eye is too great, or its antero-posterior axis too long; as a consequence, the rays coming from distant points, which are very slightly divergent and almost parallel, will be brought to a focus in front of the retina, and in order to paint their image upon this membrane, they require the aid of concave glasses, of which the dispersive power should be equal to the excess of refraction."

Every optician in the United States, we presume, is aware of all this, nor does M. S. give it as a novelty. We have merely quoted it as an illustration of the extremely clear and intelligible manner in which he treats the scientific parts of his subject.

The author does not encourage the very commonly existing opinion, that it is possible to tell from the exterior formation of the eye, namely, its rotundity, or flatness, whether a man is far-sighted or near-sighted; on the contrary, he maintains, that it is only by exception, that the exterior conformation of the eye—by an excess or a want of convexity of the cornea and of the globe in general—permits us to form an opinion as to its being

myopic or presbyopic. In most cases he says it furnishes no indication in this respect; the internal parts by their disposition and structure alone, determining the compass of sight.

A chapter is devoted to a description of the shape and manufacture of the glasses, appropriate for the use of presbyopes and myopes; another on the size and general formation of the spectacle. The remarks are judicious, and coming from so distinguished a source, are calculated to be of great utility; but as they are subjects which our best opticians are continually studying, we will spare our readers any unnecessary repetition, and husband our own space, which is but limited, for the purpose of making one or two quotations from the more interesting part of the book, viz: the author's general treatment of patients, his special advice with regard to the use of spectacles, and the general results of said advice.

"Every optician knows, that presbytics are constantly obliged by the necessities of our social system to use their eyes at much nearer distances than the natural focus of their vision will, without injurious consequences, admit of. It is true, that if the organ be naturally strong, these injurious consequences will be slow to manifest themselves; but if there be a tendency to congestion or scrofulous conjunctivitis, any over exertion of the eye, particularly at a focus unnatural to its physiological constitution, will make itself felt with fearful rapidity."

The author's advice as to the means to be employed for the avoidance of the consequences that may follow this neglect of the physiological laws of the sense of vision is so judicious, simple and practical, that we will give it as far as our space permits, and as connectedly as possible, in his own words.

"Whilst reading, writing, or engaged in other occupations requiring minute attention, the objects should be removed to the longest possible distance at which their distinctness shall be unimpaired. This distance may easily be determined by moving the object backwards and forwards, and should always be maintained during assiduous employment. During other less pressing occupations they should, on the contrary, exercise their sight at less distances, in order to preserve the faculty of accommodation, and to accustom themselves to see objects within their normal focus. But at all times they should be careful to interrupt themselves frequently, in order to change their sight to the most distant objects they can perceive. Every presbytic would do well, after five or ten minute's work upon minute, near objects, to raise the eyes and turn them for an instant to the most distant parts of the room, or even, if he be near a window which is not entered by full sunlight, to look out from his

apartments and endeavor to distinguish the details of distant objects.—This exercise, by alternately lengthening and abridging the range of vision, preserves the faculty of accommodation and the normal focus, at the same time that it prevents the enfeebling of vision."

An interruption of a few instants is sufficient to ensure all the salutary effect of this exercise. From personal experience (being ourselves slightly presbytic) we can vouch for the usefulness of the author's advice; some will say that such interruptions are troublesome and frequently impossible, but the cessation from occupation for half a minute or even a shorter time, is sufficient; and the habit once fixed, the interruption is no longer even perceived. The more closely these rules are observed, the better will the eyes resist the effects of time and use, and the later will the necessity for the use of spectacles be felt. The following passage we recommend to the particular attention of parents, and those who have the charge of the education of youth, as we have seen its inculcations constantly neglected, especially in our public schools.

"There are also certain acquirements necessitated by civilization, such as, writing, drawing, reading, without an exercise of the sight in a nearer focus than that normal to the presbytic. It will be fortunate if the bad methods of education of the child do not supervene to cause him to reduce this distance yet further. Visit a school of children who are beginning to write, and a large proportion of them will be found with the nose nearly upon their paper. In all these cases the precautions referred to are of the first necessity. It is very important to insist that children keep objects at the greatest possible distance; that they sit erect; and that they should be taught to read and write in very large characters, at least during the first years."

Long observation and repeated experiment, have convinced the author that amblyopia and presbyopia are intimately connected; in this opinion he differs essentially from MM. Bonnet and Petrequin, who remark, that they have never encountered amblyopia except in the myopic. While Mr. McKenzie accords to the two ranges of vision in this affection nearly an equal frequency.

M. Sichel accounts for the differences of opinion on this point, in the following manner.

"I have been able to determine that the observations recorded, as having been made upon my eyes, were to be ascribed either to acquired myopia, that is to say, presbytia changed into myopia, or to congenital

amblyopia with presbytia simulating myopia, or finally, to myopia augmented by the use of too strong or prematurely employed concave glasses. It is only in this last case that I have seen ocular lassitude, amblyopia, and even amaurosis, united with myopia."

The treatment given by M. Sichel for uncomplicated presbytic amblyopia, is extremely simple, viz., rest, the exercise of the sight upon distant objects, in order to re-establish the normal focus.

Absolute repose in more advanced stages of the malady. If the patient continue his labors, he must be directed to keep his work at as great a distance from him as he possibly can; and when the affection is more advanced, use convex glasses selected according to the general rules. In addition to this, he must use lotions of cold water, adding a small quantity of brandy, to render it more stimulating. "The minor degrees of this affection will promptly yield to these means." When it is more advanced, stronger stimulation will be necessary—vesication, strychnia, &c. In severe cases, of course the result will greatly depend upon the habits and circumstances of the patient.

That original long-sightedness should produce short-sightedness seems somewhat paradoxical, but so it is, and thus it is. The presbytic is constantly constraining his eyes to act at a focus unnatural to the organ. This constant violation of physiological laws sooner or later ends in the destruction of the faculty of accommodating his sight to distant objects, and in shortening his natural focus, even to the degree of causing him to contract a secondary myopia. Now, as M. Sichel states, if the patient should under these circumstances, be induced to wear concave glasses, he will be sure to aggravate his condition.

Our author in speaking of this affection, says, that "at the commencement the myopia is rather apparent than real; it is long-sightedness which has been forced to accommodate itself little by little to too short distances. The sight of the patient shortens slowly and insensibly; he feels, or those about him perceive, that he becomes myopic, that he is forced to bring objects nearer and nearer during his work.

"We have already said that a considerable number, and perhaps the great majority of short-sighted persons have become so in this manner. In children especially, this acquired myopia supervenes very frequently,

and in most cases slowly, in consequence of the bad habit which they so easily form of leaning forward over their work."

We agree fully with M. Sichel that in this manner myopia is frequently produced, but differ from his position, that these children must have originally been presbyopic. On the contrary, we are convinced that close observation will satisfy the enquirer, that in the majority of such cases, the children were not originally far-sighted, but that their eyes were feeble, either congenitally or as a consequence of some of the diseases incidental to childhood, such as measles, scarlatina, &c. &c., which will often leave behind them some local debility, which common observers will hardly perceive, but which months, nay, even years of care, will sometimes fail to remove. This debility, of course, will induce the child to bring his eyes closer and gradually closer to his work, until, as the author observes, an inveterate myopia is produced.

We give in the following quotation the author's views regarding the treatment of acquired myopia:

"When the malady is neither very ancient nor far advanced, it is sufficient to arrest its progress, or even to create a retrograde impulse, to cause objects to be removed little by little, to greater distances, according to the rules established for the treatment of myopia in general. Work should be very frequently interrupted, and the intervals should be devoted to observations of distant objects, and to bathing the eyes with cold water. This very simple treatment, if early and perseveringly employed, especially if the subject is still young, is sufficient to obtain a complete and radical cure, and to restore the primitive focus of vision."

"Spirituous liniments, excitants, fugitive blisters, &c., are useless so long as the affliction is uncomplicated with enfeebling of vision. The use of concave spectacles should be most rigorously interdicted, they definitively fix the myopia and render it incurable."

The second part of the volume is devoted almost entirely to the consideration of myopia and its complications. This affection, as the author states, may, like presbytia, give rise to amblyopia and amaurosis, and the abuse of concave glasses will lead to unpleasant consequences, even more rapidly than will the improper use of convex ones in presbytia.

This affection is often accompanied by cerebro-ocular irritation, in which case M. Sichel recommends an antiphlogistic derivation—such as leeches to the anus, small bleedings from the foot,

with purgatives and dry-cupping upon the lower extremities and lumbar region; sometimes the local and general use of mercurials with that of preparations of belladonna.

"Too early recourse to exciting liniments and blisters in the neighborhood of the affected organ should particularly be avoided; it is better, towards the decline of the irritation, to place a large blister between the shoulders, and afterwards transfer it to the back of the neck."

The author recommends the same general hygienic treatment for myopia as for presbytic amblyopia.

We feel that we have already overstepped our limits, therefore must content ourselves with one more quotation.

"It is not to be forgotten that spectacles generally diminish and end by annihilating the power of accommodation; they fix the range of vision at a certain distance from which it cannot vary. It thus results that concave glasses first confirm myopia and then increase it, and increase it the more in proportion as they are stronger."

The symptoms and treatment of several cases are given in the course of the work, which, as they serve to illustrate the author's views, are worthy of attentive perusal. The book is a highly useful one, and may be read with interest by men of all professions. Its great fault, we think, is a too frequent repetition, which, though we can perceive it to be to a certain extent unavoidable with such a subject, makes it somewhat monotonous. The meaning of the author is thoroughly given by the translator, but the book abounds with Gallicisms which might have been avoided with advantage, for though we admire the French language exceedingly, we do not like French English.

The paper and printing are unexceptionable. In this respect, the Boston publisher seems to have entered fully into M. Sichel's feeling on the subject, and humanely considered the eye-sight of the reading community. For ourselves we especially tender him our sincere thanks.

Surgical Anatomy. By JOSEPH MACLISE, Surgeon. *With colored plates.* Part IV. Philadelphia, Blanchard & Lea, 1851.

We have already, in notices of previous numbers, so freely and decidedly expressed our favorable opinion of this admirable reprint, that it seems almost "like a thrice told tale," to reiterate it on the appearance of each successive fasciculus.

The unanimous approval of the whole medical press, and the sanction of the teachers of this department in the various schools, have already stamped it as a work of rare merit, and we are happy to see that the present number does not in the least detract from its enviable reputation.

The contents of Part IV. present the dissections and surgical relations of parts of deep interest to the lithotomist; a brief enumeration of them is all that the limited space allotted to such notices will admit of.

Plate 47 exhibits the surgical dissection of the principal blood-vessels and nerves of the iliac and femoral regions. Plates 48 and 49, the relative anatomy of the male pelvic organs. Plates 50 and 51, the surgical dissection of the superficial structures of the male perineum. Plates 52 and 53, the surgical dissection of the deep structures of the male perineum, together with the lateral operation of lithotomy. Plates 54, 55, 56, the surgical dissection of the male bladder and urethra, with a comparison of the lateral and bi-lateral operations of lithotomy. Plates 57 and 58, congenital and pathological deformities of the prepuce and urethra—stricture and mechanical obstructions of the urethra. Plates 59 and 60, the various forms and positions of stricture and other obstructions of the urethra—false passages—enlargement and deformities of the prostate. Plates 61 and 62, deformities of the prostate—deformities and obstructions of the prostatic urethra.

From this brief enumeration of the contents, our readers can judge of the extent of this number. Of its excellent artistical merits, they can only satisfy themselves by personal inspection, from which they cannot fail to rise with the conviction, that both in the plates, and in the judicious and perspicuous commentaries, the surgeon has here offered him a complete and reliable

guide. The work will be completed in one more number, which will be published at the price of one dollar.

Urinary Deposits, their diagnosis, pathology, and therapeutical indications. By GOLDING BIRD, M. D., F. R. S., F. L. S. Assistant Physician and Lecturer on Materia Medica and Therapeutics, at Guy's Hospital, &c. &c. *Second American, from the third and enlarged London edition.* Philadelphia, Blanchard & Lea, 1851.

The new edition of Dr. Bird's work, though not increased in size, has been greatly modified, and much of it re-written, and now presents in a compendious form, the gist of all that is known and reliable in this department. From its terse style and convenient size, it is particularly applicable to the student, to whom we cordially commend it.

THE MEDICAL EXAMINER.

PHILADELPHIA, AUGUST, 1851.

NOTICE TO CORRESPONDENTS.

The attention of our correspondents is respectfully directed to the fact, that the *business* department of this journal is entirely distinct from the *editorial*. Much time and disappointment will be saved, therefore, if *all* letters connected with the former are directed to the Publishers, Messrs. Lindsay & Blakiston, who have the entire management of the subscription list, mailing of the numbers, and all else connected with the distribution.

Communications, and books for review, should be addressed to the Editors.

SYDENHAM SOCIETY OF LONDON.

We are requested to state, that as it is no longer possible to obtain the entire series of the Society's publications, in consequence of no

complete sets remaining, of the works issued for the 1st, 2d, and 3d years, and as the applications are frequent from persons who, having certain of the Society's works, are anxious to obtain the others with which they were originally issued, the Council of the Society have thought it expedient to re-arrange those works which can still be obtained, so that *new members*, by subscribing for any past year, may obtain a set of books that shall be complete without those of any other year; whilst any one who wishes it may still obtain them in the order in which they were issued.

LIST OF THE SOCIETY'S WORKS, IN THE ORDER IN WHICH THEY WERE ISSUED.

For the First Year, 1843–4.

"Hecker's Epidemics of the Middle Ages," one vol. 8vo., pp. xx. 380.
"Louis on Phthisis," one vol. 8vo., pp. xxxv., 571.
"Th. Sydenham Opera Omnia," one vol. 8vo., pp. xxx., 668.

For the Second Year, 1844–5.

"The Seven Books of Paulus Ægineta," vol. 1, pp. xxviii., 683.
"Observations on Aneurism," one vol. 8vo., pp. xii., 524.
"Simon's Animal Chemistry," vol. 1, 8vo., pp. xx., 360, plate.

For the Third Year, 1845–6.

"Simon's Animal Chemistry," vol. II., 8vo., pp. xii., 560, 2 plates.
"Paulus Ægineta," vol. II., 8vo., pp. xi., 511.
"Hasse's Pathology," 8vo., pp. xvi., 400.

For the Fourth Year, 1846–7.

"The Works of W. Hewson," in one vol., 8vo., pp. lvi, 360, portrait and 8 plates.
"Dupuytren's Lectures on Diseases and Injuries of Bones," one vol. 8vo., pp. xvi., 459.
"The Works of W. Harvey, M. D.," complete in one vol. 8vo., pp. xcvi., 624.

For the Fifth Year, 1847–8.

"Paulus Ægineta," vol. III., pp. viii., 653.
"Feuchtersleben's Medical Psychology," pp. xx., 392.
"Microscopical Researches of Schwann and Schleiden," pp. xx., 268, 6 plates.
"Memoirs of the French Academy of Surgery," pp. x., 293.

For the Sixth Year, 1848–9.

"Rhazes on the Small Pox and Measles," 8vo., pp. viii., 212.
"The Genuine Works of Hippocrates, translated from the Greek," vol. I., 8vo. pp. x., 466.
"The Works of Sydenham, translated from the Latin," vol. I., 8vo., pp. cvi., 276.

"Rokitansky's Pathological Anatomy," vol. II. (the first issued), 8vo., pp. 375.

For the Seventh Year, 1849–50.

"The Genuine Works of Hippocrates," vol. II., pp. 406.
"Essays on Puerperal Fever, and other Diseases peculiar to Women," 8vo., pp. 552.
"The Works of Sydenham, translated from the Latin," vol. II., pp. 396.

For the Eighth Year, 1850–1.

"Rokitansky's Pathological Anatomy," vol. III., 8vo., pp. xvi., 467.
"Hunter on the Gravid Uterus," one vol. folio, 34 Plates, with descriptive letter-press.

List of the Works that may still be had, arranged in the order in which they may be obtained by New Members, on payment of five dollars for each year.

Third Year, 1845–6.

"Sydenhami Opera Omnia." One vol.
"Hasse's Pathological Anatomy."
"Rhazes on the Small-pox and Measles."

Fourth Year, 1846–7.

"The Works of Hewson.'
"Dupuytren's Lectures on Diseases and Injuries of Bones."
"Memoirs of the French Academy of Surgery."

Fifth Year, 1847–8.

"Feuchtersleben's Medical Psychology."
"Microscopical Researches of Schwann and Schleiden."
"The Works of W. Harvey, M. D."

Sixth Year, 1848–9.

"The Genuine Works of Hippocrates, translated from the Greek." In two vols.
"Essays on Puerperal Fever, and other Diseases peculiar to Women."

Seventh Year, 1849–50.

"The Works of Sydenham, translated from the Latin." In two vols.
"Rokitansky's Pathological Anatomy." Vol. II. (the first issued.)

Eighth Year, 1850–1.

"Rokitansky's Pathological Anatomy." Vol. III.
"Hunter on the Gravid Uterus." One vol., folio. 34 Plates, with descriptive letter-press.

We insert, with much pleasure, the following card from Dr. Gross, and trust that it may receive the prompt attention which its importance demands.

RESULTS OF SURGICAL OPERATIONS IN MALIGNANT DISEASES.

To the Medical Profession of the United States:

The undersigned having been appointed, at the last meeting of the American Medical Association, Chairman of the Committee on the "Results of Surgical Operations in Malignant Diseases," respectfully solicits contributions to the subject, founded upon personal observation. To place the subject in as tangible a form as possible, he begs leave to direct attention to the following points:

1. The difference between cancerous and cancroïd diseases, or those affections which are truly malignant, and those which are only partially so. In the former category are comprised scirrhus, encephaloïd, and melanosis; in the latter, certain maladies of the skin and mucous tissues, as lupus, cheloïd, eiloïd, and cancer of the lip.

2. The precise seat of the disease, as the skin and subcutaneous cellular tissue; the eye, ears, nose, face, lips, tongue, salivary glands, jaws, and gums; the lymphatic ganglions of the neck, axilla, groin, and other regions; the mammary gland, uterus, ovary, vulva and vagina, penis and testis; the anus and rectum; and, finally, the extremities.

3. The age, sex, temperament, residence, and occupation of the patient.

4. The cause of the disease, its progress, and the state of the part and of the system at the time of operation.

5. Mode of operation; whether by the knife, caustic or ligature.

6. Time of death, or relapse, after the operation.

7. Examination of the morbid product; how conducted—whether by the unassisted eye alone, or by means of the microscope, and chemical tests.

The undersigned hopes that the importance of the subject confided to him, as chairman of the committee above referred to, will be sufficiently appreciated by his professional brethren, to induce them to aid him in carrying out the wishes of the American Medical Association. The subject is one of absorbing interest, and cannot fail, if properly treated, to elicit matter of the greatest benefit. It is very necessary that all communications upon the subject should be sent to the chairman of the committee by the 1st of January, 1852.

Medical journals, and newspapers friendly to the interests of medical science, will confer a favor upon the undersigned by inserting the above notice.

S. D. Gross, M. D.

University of Louisville, June 29, 1851.

FOURTH ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

We copy from the Charleston Medical Journal and Review, for July, the following account of the opening of the meeting in Charleston in May last:

It was composed of delegates, many of high distinction, from twenty-one States of our Union, and a more respectable assemblage has seldom been convened on any former occasion. The President, Dr. R. D. Mussey, of Cincinnati, took the chair at 11 o'clock, and extended a cordial salutation to the members upon their re-union, and congratulations upon the many benefits resulting from these annual assemblages of the wisdom and experience from all parts of the Union.

Upon being seated, the Committee of Reception advanced, and, through their chairman, Dr. T. Y. Simons, addressed the President and members in the following terms:

"*Mr. President and Gentlemen:*—It is my pleasing and honorable duty, as Chairman of a Committee representing the South Carolina Medical Association, to express to you the high appreciation of your acceptance of the invitation of that body, and gratification in beholding so many of our medical brethren, of every section of the Union, assembled in Charleston, the ancient metropolis of South Carolina, and to tender to you, with the deepest emotions, our most heartfelt welcome.

"We will cheerfully unite with you in all efforts to elevate the moral and intellectual excellence of our profession, and promote the cause of science and humanity, but beyond this, we desire to extend to you, individually and collectively, all the social hospitalities of which we are susceptible.

"The assembly of so large a number of medical gentlemen from all parts of the Union, holding eminent positions in the profession, coming, in many instances, from a great distance, at considerable expense, inconvenience and personal sacrifice, for the promotion of medical improvement, and thus likewise subserving the cause of science and humanity, is, in my opinion, a sublime spectacle. We seek no honors nor trophies; we crave no ambition, pomp, nor self-aggrandisement; we desire only, and if we succeed the reward is ample, to do good to mankind. We unite with you as brothers, in these noble and benevolent efforts, and we invoke, on this solemn occasion, the blessings of the Great Supreme.

"Mr. President and gentlemen, I shall not detain you, except again to repeat, that with our warmest feelings we bid you a most hearty welcome."

To which Dr. Mussey replied substantially as follows:

"*Mr. Chairman and Gentlemen of the Committee:* It is with no ordinary feelings that I respond in behalf of the American Medical Association, and express our gratification at your warm and hospitable reception.

"Charleston has been long renowned for the hospitality of her citizens, and the enlightened character of her physicians, both as regards moral and intellectual endowments. High, however, as she stood, I was not aware until I arrived here, that the Medical Society of South Carolina was the first body that proposed that means should be adopted for the improvement of medical education. I now, Mr. Chairman, return you our thanks for your kind, and hospitable, and warm reception; and feel confident that we will harmoniously unite in the promotion of the grand objects of the Association."

The Committee on Nominations having reported, through their chairman, suitable candidates for the officers of the Association for the ensuing year, the same was confirmed, and Dr. James Moultrie, of South Carolina, was declared President of the Association.

The President elect then took the chair, and returned thanks for the honor thus conferred upon him, in the following terms:

"*Gentlemen of the Association:* I know not in what terms suitably to express my sincere acknowledgments for this unlooked for manifestation of appreciation and kindness.

"When I look around, and recognize the many superior intellects and higher professional acquirements by which I am surrounded, I feel that I am about to occupy a position which more rightfully belongs to another.

"But, if a life devoted to the interests of the profession, and the promotion of the objects for which this institution is founded, give me any claim to consideration, I have the assurance that the mantle of my illustrious predecessors may not be unworthily or ungracefully worn.

"In the language of the first of them, I have ever 'loved my profession;" nay more, I am proud of it. I have loved it for its sympathies and suavities; its benignities and charities; its activities and self-sacrifices; for the boundless scope of knowledge which is opened before it; its disinterested pursuit of the true, the beautiful, and the good; the exalted mission which has been appointed to it on earth; and the universal appreciation in which it is held, and confidence reposed in it, by mankind; and I am proud of it, not alone for what has thus been adverted to, but for its habitual singleness of purpose; its almost immu-

nity from prison discipline; the little notoriety it enjoys in the statistics of crime; and the little trouble it has given to the tribunals of justice, or of civil jurisprudence.

"Never, however, have I been so proud of it as when, four years ago, I enjoyed the gratification of meeting so large an assemblage, in the city of 'Brotherly Love,' characterized by so much intelligence, so much urbanity, so much dignity, and so much condescension; convened for the purpose of systematizing the principles of professional prosperity, and cultivating those habits of social harmony, the practice of which have immemorially obtained for it the definite epithet of 'the paternity:' or when, two years afterwards, at the modern abode of the 'Humanities,' its labors of usefulness and love were renewed, amidst the outpourings of hospitalities, which could only have issued from heads and hearts the most highly cultivated and refined.

"The accidents of life, and the visitations of Providence, which come unto all of us in turn, I have to regret, denied me the gratification of being also present, on the intermediate occasions, in the great valley of the Mississippi, and the commercial emporium of the Chesapeake.

"For the privilege, as well as the distinction, of presiding over a body constituted of such elements, I am profoundly grateful. I thank you, gentlemen, again and again; and when our present labors shall have closed, and we shall have once more reached our respective homes, I hope we shall be able to realize, in our experience, that 'it was good for us,' in like manner, 'to have been here.'"

The following is a correct list of the number of States represented, and the number of delegates from each:

1. Massachusetts,	10 delegates.	14. Louisiana,	2 delegates.
2. Rhode Island,	5 "	15. Tennessee,	3 "
3. Connecticut,	3 "	16. Kentucky,	4 "
4. New York,	17 "	17. Ohio,	5 "
5. New Jersey,	6 "	18. Indiana,	1 "
6. Pennsylvania,	35 "	19. Illinois,	1 "
7. Delaware,	2 "	20. Missouri,	3 "
8. Maryland,	5 "	21. Dist. of Columbia,	2 "
9. Virginia,	11 "		
10. North Carolina,	7 "	Total,	185
11. South Carolina,	38 "	Permanent members,	10
12. Georgia,	23 "		
13. Alabama,	1 "	Grand Total,	195

RECORD OF MEDICAL SCIENCE.

SURGERY.

MEDICAL SOCIETY OF LONDON, APRIL 5TH, 1851.

New Operation on the Foot.—Mr. T. WAKLEY read a paper on a new operation lately put in practice by him. It consists in dissecting out the astragalus and os calcis, and leaving the other tarsal and metatarsal bones undisturbed, and is intended in certain cases as a substitute for Syme's or Chopart's operations.

The author remarked that excision of joints was first attempted by Mr. Parkes, of Liverpool, in the year 1782, who had one successful case of excision of the knee-joint in a seafaring man, who was able to follow his calling nearly as well after the operation as before. Another patient operated on by Mr. Parkes died. Excision of the elbow-joint was performed three times in France in the same year with complete success: one of those operated upon was afterwards enabled to thrash wheat. Mr. Wakley then made some remarks on the process of anchylosis sometimes performed by nature in cases of diseased joints, and considered this an argument for the operation of excision; still, he remarked that the constitutional effect of this operation was more severe than that produced by amputation, and therefore it could not be performed with safety when the powers of the system were at a very low ebb. He considered the operation justifiable if the constitution be good, if performed in time, and with the necessary surgical skill. When the arm was operated upon our object should be to preserve the mobility of the elbow-joint, but in the lower extremity, when more firmness was requisite, anchylosis was the best result that could be obtained. The ankle-joint is generally considered as best adapted to the operation of excision, but Mr. Wakley in some cases preferred it to Chopart's or Syme's operation.

The author then remarked on the necessity of preserving, if possible, the anterior tibial and other arteries supplying the foot, so as to keep up its nutrition, and also upon the delicate dissection necessary to effect this object. Mr. Wakley then gave a short account of the case in which he had first performed this operation. The patient, a young man, of dark complexion and scrofulous habit, and whose occupation required a good deal of walking, had an open abscess just under the ankle-joint for two years; he then had the misfortune to sprain his ankle, and was admitted into St. George's Hospital: he was afterwards sent to Margate Hospital, when a piece of carious bone came away. He then became much better, and was enabled to return again to his work, but only for a month, after which period he was admitted into Brighton Hospital, where amputation at the ankle-joint was proposed; but to this operation the patient refused to submit, and he left accordingly. He was then admitted into the Royal Free Hospital, London, under the care of Mr. T. Wakley. On his admission, Dec. 21, 1847,

the integument all around the heel and ankle-joint was much discolored and unhealthy in appearance, with three openings, two communicating with the astragalus, and one with the os calcis. On introducing a probe, rough bone could be detected; there was also a good deal of constitutional disturbance, and symptoms of hectic had appeared. Mr. T. Wakley, finding that the patient steadily opposed the removal of the foot, and having satisfied himself that the disease was confined to the os calcis and astragalus, proposed the removal of the two bones, to which the patient consented. The operation was performed on Dec. 27, 1847. The os calcis, astragalus, and the malleolar processes being removed, the posterior artery alone required tying; the wound healed kindly, and chiefly by the adhesive process: the man was then sent into the country, and soon regained his flesh, and is now in good health, with a tolerably useful limb, and without any appearance of the disease in any other part: both bones were so carious that they were mere shells.

Mr. Smith quite agreed that this had been a most successful operation, to which he had at first been opposed, as, although more than three years had elapsed, no reappearance of the disease had taken place.

Mr. B. Childs, who did not arrive until the paper was nearly concluded, did not consider Mr. T. Wakley's operation a new one; it was only a modification of a principle long recognized by surgeons, viz., that we should always in our operations spare as much as possible of the human frame: he considered the chief merit and difficulty of the case consisted in the diagnosis.

Mr. Clark remarked on the impropriety of a member making observations on a paper he had not heard, and also observed, that Mr. Wakley did not claim to himself the discovery of a new principle, but only an adaptation of the old-established one mentioned by Mr. B. Childs: he considered this operation might as fairly be called after the name of the inventor as those known by the names of Chopart's and Syme's operation were after their respective inventors.

Mr. E. Canton thought that in the paper sufficient attention had not been paid to diagnosis of whether these were the only bones diseased; thought Mr. Wakley fully entitled to give his name to the operation, though the point for inquiry was—Is this operation better than Syme's and why?

Mr. Gay said, that Mr. Wakley's patient could now go up a ladder, &c., and the tendo-achillis had so attached itself to the structure of the foot, that the gastrocnemius and solens had pretty complete control over its motions; thought that where the disease was limited and the constitution good, that this operation was sometimes preferable to Syme's; but as, in Mr. Wakley's operation, the convalescence was more tedious, and greater powers of reparation were necessary, thought Mr. Syme's best where there was much debility, although in the latter operation there was often a tendency to sloughing of the flap. Mr. Gay did not consider that a joint or bone in the neighborhood of another diseased bone was necessarily diseased also. He related a case in which, about three weeks ago, he had removed the os calcis, and found the surface

of the astragalus quite denuded of cartilage; he did not, however, interfere with it, and although the youth was at the time of the operation in a very bad state of health, he is now rapidly recovering, with every prospect of a permanent cure.

Mr. Wakley in reply said, that he was not desirous that the operation should be called after him; had brought the case forward for the general good, and not for his own personal aggrandizement; thought this operation was only to be performed when the os calcis and astragalus were alone diseased. He could not agree with Mr. Gay, but thought that all the parts implicated by the disease should be removed.

London Lancet.

Tannin in Ophthalmic Diseases.—M. Hairion of Louvain has a very high opinion of Tannin in eye-diseases. The following remarks by him are quoted from the *Journal de Médecine et de Chirurgie Pratiques* for October 1850.

Tannin has, probably, been only used in catarrhal ophthalmia, in the proportion of one part to 120 of water; but the want of efficacy of this solution has made it fall into almost complete disuse. For more than five months, I have employed tannin in the form of pommade, in thick mucilage, in fine powder, and especially in concentrated solution (one part to three of water). The affections in which it has proved most successful have been acute and chronic blennorrhœa, œdematous swelling of the conjunctivæ, vegetating granulations, vascular and ulcerative affections of the cornea, and especially pannus, which has been cured, in some cases, with astonishing rapidity.

Tannin has been justly styled the styptic *par excellence*; its local mechanico-chemical action renders it highly useful in ophthalmology, whether to retard muco-purulent effusion of the conjunctiva, to combat the relaxation of that membrane, to obtain the obliteration of cellulo-vascular productions, or to diminish dilated or newly-formed vessels; or, by producing coagulation of the plastic fluids, to accelerate the cicatrisation of ulcers of the cornea, strengthen its softened tissue, and prevent its projection or laceration.

This remedy is free from the objections which may be urged against other astringents. Its application is not painful, it produces no severe reaction, and leaves no caustic marks, nor indelible incrustations.

Tannin has been employed in the circumstances indicated above, frequently with signal success, sometimes without advantage, never with injury.—*Lon. Jour. of Med., March*, 1851.

Case of Obturator or Thyroidal Hernia successfully relieved by Operation. By Henry Obre, formerly Assistant-surgeon to the St. Marylebone Infirmary.—After commenting on the extreme rarity of this form of hernia, and stating that he had been unable to find any record of its having been detected and relieved by operation during life, the author relates a case in which he operated successfully. The patient, a female

aged fifty-five, the mother of a large family, was seized with symptoms which led her medical attendant (Mr. Gardener) to believe that she was suffering from rupture. She denied that this was the case, and a careful examination convinced Mr. Gardener that there was no hernia in the usual situations of that disorder. A little below the femoral region on the right side, however, he detected a degree of hardness resembling a small gland, and deeply seated; with some general fulness about the part. The author saw this patient on the fourth day after the symptoms had begun; at this time, she was suffering extreme abdominal pain in the umbilical region; during the previous twelve hours, her vomiting had been stercoraceous and incessant; the countenance pale and contracted; voice faltering; pulse, weak, small, and intermitting—in short, all the symptoms of pending dissolution from strangulated intestine were present. On careful examination, nothing could be detected but a slight degree of fulness in Scarpa's triangle on the right side; that on the opposite side being well marked; on using firm pressure with the ends of the fingers over the neighborhood of the femoral artery, and a little below the saphenous opening, a distinct hardness was to be felt, slight in extent, but giving the impression as if the sheath of the vessels was being pressed on. The state of the patient was such as to induce the author to propose to make an incision into the upper part of the thigh, down to the hard structure, in the hope that he might find confined intestine low in the femoral canal. He made a straight incision into Scarpa's triangle, as in the operation for tying the common femoral artery; beginning about three inches below Poupart's ligament. When the cribriform fascia was opened, and the saphenous opening exposed, no hernial sac was found, but the hardened structure could be felt lying deep to the inside of this opening. The dissection was with some difficulty continued downwards; the fascia lata was divided, and the pectinæus muscle exposed. The fibres of this muscle were divided transversely for about an inch and a half or two inches, and a hernial sac was exposed, which rose up into the wound to the size of a pigeon's egg. The finger being passed along the sac, entered the obturator opening. The sac was opened, and the intestine was found to be a portion of the small gut, blue and congested. The opening through which it passed did not tightly enclose its neck, but it was considered prudent slightly to divide the edge. In doing this the saphena vein was wounded, and it was necessary to apply a ligature to its upper part. This was the only ligature required. After the operation, no medicine was given; in the course of the day the bowels acted three times, and in the course of a few days the patient had quite recovered.—*London Lancet, July* 5, 1851.

Collodion in Skin Diseases.—Collodion seems to act admirably in those cases where a kind of artificial epidermis is required. Dr. Spengler, in the *Neue Med. u. Chir. Zeitschrift*, No. 28, 1850, gives various cases where the collodion either led to the cure or greatly relieved the symptoms. The author mentions that this substance was first used in

skin diseases by Mr. Wilson, in this country; and gives details of the success he (the author) met with in thus treating impetigo, lichen, herpes labialis, chronic eczema, and cracked nipples. Our readers are aware that collodion is largely used in the London Hospitals in erysipelas of the face.—*London Lancet, July* 5, 1851.

Aneurism on the Common Carotid Artery; Deligation of the Vessel; Death.—Our readers may remember that the carotid artery was tied some months ago, with perfect success, by Mr. Johnston, at St. George's Hospital. The delegation of the vessel was here undertaken for the sake of commanding hæmorrhage from the interior of the mouth, brought on by the thrust therein of the point of a parasol. The boy did extremely well, and presented none of the cerebral symptoms which are said sometimes to follow the interrupted supply of the blood to the brain.

We have now to put upon record an operation of the same kind, performed upon an adult, for the cure of an aneurism of the carotid artery. Though many methods have by turns been proposed to procure the obliteration of the sac,—as pressure, injection, and galvano-puncture, the results have been so unsatisfactory, that the only means likely to afford permanent relief is the deligation of the vessel on the cardiac side of the tumor. Such deligation seems, however, somewhat hazardous, when so important a trunk as the carotid artery is to be tied; but the cerebral disturbance which might naturally be looked forward to, is in fact very seldom noticed.

It is well known that we are indebted to chance for the discovery of the inocuity of this operation; a surgeon wounds the carotid whilst removing a scirrhous tumor from the side of the face, and to save his patient's life, he ties the vessel, and the case does well. Abernethy was the first, in this country, who attempted the operation; Fleming followed his example, and the deligation of the carotid artery soon became an established and acknowledged operation in surgery. The vessel has been several times tied for the cure of aneurism by anastomosis, or erectile tumors in the cheek or eye: Mr. Travers, Mr. Dalrymple, Mr. Wardrop, have successfully operated in this country in cases of this nature.

When the deligation is undertaken for the cure of aneurism, it is of course very advantageous that the tumor should be so situated as to allow of the ligature being applied in that portion of the course of the artery which offers the greatest facility for such operation—viz. in the upper triangle of the neck. But aneurisimal tumors are sometimes situated so low down, as to leave but very little room between their lower border and the clavicle; here the dissection will of course be longer, and the whole operation require much caution. Dr. Robertson, of Edinburgh, operated in a case of carotid aneurism where the sac was situated low down, and the tumor had burst into the œsophagus; he made his incision to the internal side of the sterno-mastoid muscle only

one inch in length, and succeeded in securing the vessel. Mr. Fergusson had to surmount a difficulty of the same kind, as the tumor came close to the clavicle; the artery was, however, laid bare and tied, after a careful dissection, which presented more than usual difficulty.

Mary S——, aged thirty-eight, and unmarried, was admitted into King's College Hospital, June 11, 1851, under the care of Mr. Fergusson, with a swelling on the left side of the neck, presenting several symptoms of carotid aneurism. The patient has generally enjoyed good health, but has led a dissipated life, and endured great privations. None of her family have suffered from diseased arteries or aneurism. About eighteen months ago she was under treatment at the Westminister Hospital for gangrene of the toes, induced by exposure to wet and cold during two days and nights. Six months since, the patient began to cough, and to experience difficulty of swallowing; about the same time she likewise noticed a small swelling in the course of the carotid artery on the left side, which, however, gave her no pain. The swelling gradually increased to its present size, and the function of respiration became more and more impeded.

On examination, a tumor, about the size of a small fist, tense, pulsating, and tender to pressure, was noticed on the left side of the neck, over the course of the carotid artery. It extended from the base of the jaw nearly to the upper border of the clavicle. No morbid sound of the heart could be detected, but a distinct bruit was heard in the tumor; the general arterial system seemed healthy. The breathing was very difficult. On the third day after admission, the patient became very low and weakly; the dyspnœa was great, as the tumor seemed somewhat against the trachea and larynx. The skin over the swelling was becoming very red and tense.

Mr. Fergusson examined the patient just before proceeding with several other operations; and finding her with so much difficulty of breathing, and the tumor threatening to burst, he determined to tie the carotid artery on the cardiac side of the tumor. The patient had become suddenly worse, and this circumstance necessitated prompt measures; but it had been Mr. Fergusson's intention to use appropriate internal remedies before undertaking the operation—a precaution which would certainly in many instances be extremely useful.

No delay could, however, intervene in this instance, for there was every probability of the tumor bursting outwardly, as it presented a highly inflamed spot, or the patient dying from suffocation. When she was brought into the theatre, the question arose whether, in her weak state, the patient should inhale chloroform. Mr. Fergusson thought that the anæsthetic agent should be administered, but with great caution.

When the patient was completely insensible, or nearly so, and the head slightly raised, Mr. Fergusson commenced with a longitudinal incision, about three inches long, to the inner side of the mastoid muscle, from the lower portion of the tumor down along the upper end of the

sternum. After the cellular tissue, fascia, and platysma had been divided, the sterno-mastoid came into view, and as here the vessel lay very deep, Mr. Fergusson cut this muscle across. The sterno-hyoid and thyroid were now carefully divided, as well as some loose cellular tissue, and the sheath of the vessels was perceived. This was cautiously opened upon the director, and the aneurism-needle passed round the carotid artery from without inwards, when the vessel was well secured by a strong thread. Temporary tightening caused the pulsations of the tumor to cease, and when this had been ascertained, the ligature was finally fixed, and the lips of the wound brought together by suture.

No cerebral symptom became manifest after the deligation of the artery, but the pulsations of the radials became much slower; the breathing, which had been very labored, regained some vigor, and the patient was removed in a comparatively satisfactory state.

Mr. Fergusson took occasion to remark, that he had not expected when the patient was admitted into the Hospital, to operate so soon, as he intended to afford her eight or ten days' rest and appropriate treatment; but the disease had progressed so rapidly, inflammation had set in so quickly, and the dyspnœa was so great, that if not interfered with, the tumor would have burst either internally or externally. On consultation with his colleagues he had expressed his conviction, and they had agreed, that the vessel should be tied forthwith, though the space between the clavicle and the lower portion of the tumor was very short. The aneurism was probably situated on the upper portion of the common carotid, or just at the bifurcation, but to know the exact position was not important as regarded treatment.

He (Mr. Fergusson) had made his incision very long, reaching even over the sternum, as the vessels lie so deep in this locality that plenty of room is very necessary, and on this ground he had divided the sterno-mastoid muscle without hesitation, the more so as this operation is one involving life, and that a muscle was of little importance in comparison. Mr. Fergusson had been somewhat apprehensive of the small veins in that region, in direct communication with the veins of the neck, but the hæmorrhage had altogether been trifling; the jugular vein was not seen at all. The best and only step had now been taken for the patient's safety; she might, however, now die from the bursting of the sac either externally or internally. A favorable circumstance in the operation was, that the patient had a very long neck, and was very thin.

At four o'clock in the afternoon the effects of chloroform had been recovered from, the breathing was more regular than previous to the operation, but there was an accumulation of mucus in the air passages which the patient could not force away. She was given squill and hyoscyamus in camphor mixture. At seven in the evening respiration was still less embarrassed, the pulse 90, the tumor slightly diminished in size, and very tense; but towards three o'clock in the morning the patient was seized with a short convulsive fit, and died soon afterwards, without any previous impairment of cerebral influence.

On a post-mortem examination the parietes of the heart were found

very thin and weak; the arterial system immediately above that organ did not exhibit any striking alteration, except the abdominal aorta, where abundant atheromatous deposit was found; the other organs of the chest were healthy. The ligature was firmly fixed, and situated about an inch and a half below the tumor; the latter was filled with coagulum and soft fibrinous masses, and was situated opposite the thyroid body, extending as high as the os hyoides. The aneurism was of the description in which all the coats of the vessels had originally been equally distended; the opening of the artery into the lower part of the sac was smooth and round, and continuous with the walls of the tumor; the upper aperture was about of the same kind, having a slight valve added to it, and the carotid artery, at its emergence, was only half the calibre of the portion which was seen entering the sac. The whole of the latter lay on the left lobe of the thyroid body, on the trachea and œsophagus, these organs being evidently compressed by the tumor.

The vagus nerve, imbedded in the walls of the sac, was seen entering and emerging from these walls, close to the artery; in gently pulling the nerve above and below, its outline could be seen tightening along the parietes of the sac. This peculiar disposition of the vagus may be looked upon as greatly conducive to the intense dyspnœa which the patient suffered for the last week of her life.

The diagnosis of this case did not offer difficulties of a serious nature, but it will be conceded that too much care cannot be bestowed upon the recognition of the actual nature of the disease; for it is principally in the neck that tumors and abscess may simulate aneurism. Enlarged glands are especially liable to create deception; but it is seldom that the thrill communicated to the hand, or the bruit conveyed to the ear, are so distinct as in true aneurism, as was observable in the foregoing case. The full dilatation of all the coats of the vessels took place in a comparatively short time, six months having only elapsed since the patient perceived the swelling; for such cases as the one related by Mr. Hodgson, where a femoral aneurism destroyed an old man in three weeks, are certainly very rare. It will be perceived that Mr. Fergusson's patient was a female; we need not point out how seldom aneurisms affect women, this fact lending, as we venture to think, much weight to the supposition that violent exertion has much influence on the formation of aneurismal tumors, where vessels are not in a sound state.—*London Lancet.*

OBSTETRICS.

On the Efficacy of the Tonic and Sedative Plan of Treatment in Cases of Fever and Disturbed Nervous Functions after Delivery. By T. W. Garlike, Esq.—In a former paper I endeavored to show that a great proportion of cases, vaguely designated "puerperal fever," are not to be regarded as of sthenic or inflammatory character, dependent upon increased vascular action; but, on the contrary, that they are simply

attributable to a morbid sensibility of the nervous system resulting from depression of nervous energy. I am now anxious to illustrate my views on this subject still further; and, as the case I am about to relate is highly corroborative of the views I have advocated, I shall give it in detail.

The case runs thus:—Mrs. ——, aged 43, middle-sized, and of robust appearance, requested my attendance, being in labour, (her first pregnancy,) on the evening of the 4th July last. Her pains were, to all appearance, of a useful "bearing down" character. On making an examination I found the os tincæ had dilated just sufficiently for me to ascertain that it was a vertex presentation. Having represented to Mrs. —— that my services were not required for the present, I left; at the same time I instructed her nurse to call me if any change manifested itself during the night. My patient resided within a short distance of my house. On the morning of the 3rd, Mrs. —— described the pains which had followed up through the previous night as having been of a severe kind, but not forcing. On making an examination I found that the labour had not made much progress; during the day she was tolerably free from pain, and took nourishment; but at night, her pains having returned with more severity, my services were again requested. I stayed through the night; there were occasional active pains, but not sufficiently forcing to be efficacious. At 5 a. m. of the 4th, gave a draught of sulphuric ether and camphor mixture, with 25 drops of laudanum. Visited my patient again at 10 a. m.; the draught had produced some sleep, from which she was refreshed; but, as the day advanced, she manifested symptoms of great prostration; the countenance was anxious and solicitous; skin hot; pulse frequent, small, and irregular; tongue dry, creamy and brown down the centre; tenderness over the hypogastric region, with inability to pass urine.

The symptoms were relieved considerably by the use of the catheter, which was resorted to frequently during the labour.

Ordered saline febrifuge every six hours.

In the evening she appeared much better in all essentials; the temperature of the skin was reduced, tongue moist, bowels acted upon twice, circulation more quiet, and the countenance and conduct more indicative of hopefulness. Although my patient had now been ill two days and nights, during which time she had borne a large proportion of good forcing pains, still, on making an examination, the labour had not advanced much, the os tincæ, though certainly more dilated and yielding, was, nevertheless, rigid, and the lips thick; the head had made some trifling descent, but had not passed the true pelvis, neither did the pains (which were severe) appear to exercise any bearing-down influence upon it. The great impediment appeared to be the rigid, unyielding condition of the osseous structure of the mother, and the highly organized condition, as well as great development of the fœtal cranial bones, which were firmer than I ever met with; there was also a want of room on the antero-posterior diameter of the pelvis.

In carrying out the examination, which was conducted with great care, a symptom presented itself which gave me some concern: I de-

tected crepitation over a limited portion of the mucous membrane in the perineal aspect of the vagina; when a pain was on, it was clearly made out, and it instantly conveyed to my mind the supposition that it might be, as in other tissues when subjected for a long time either to increased action of the capillaries or the opposite state of these vessels, congestion, the first symptom of sloughing taking place, or the formation of pus.

Looking upon my patient as being in a condition to require watching, I stayed the night, hoping some favorable change might show itself before morning. She stated that she had not felt the movements of the child for some hours.

Ordered a draught, with 30 drops of laudanum.

About midnight, Mrs. —— began to exhibit symptoms of restlessness and delirium, and the circulation began again to take on the characteristics of exhaustion by increasing rapidly its frequency. There now appeared from the vagina a copious discharge of dark, fetid, grumous water, which satisfied me of the death of the fœtus. Gave a draught of ammonia, ether, and morphia. She slept at intervals till the morning of the 5th, when her exhausted condition determined me to set about completing delivery without further delay; but prior to deciding upon this step, I consulted with my neighbor Mr. Ayres as to the best mode of accomplishing the object. At this time, Mrs. —— was exhibiting all the symptoms of exhaustion: the pulse at the wrist was 160; tongue parched and brown; skin hot, and of a brick-dust color; constant delirium of a low rambling kind, interrupted occasionally by lucid intervals, when she implored that decisive steps for the completion of the labour might be adopted. The os tincæ was thoroughly dilated, but the head had not made any considerable descent; the mischief which was being produced by this long-continued pressure on the soft parts was everywhere to be detected; the crepitation which I described as existing, on the 4th, in the vaginal mucous membranes, had now resulted in a fissure, an inch and a half long, through the mucous membrane, extending into the cellular tissue. The perinæum was intensely swollen and covered with vesicles, involving the whole margin of the anus; the bladder had been entirely dependent on the use of the catheter since its first introduction. Feeling satisfied that the fœtus was dead, and the case being one which called for immediate interference, craniotomy suggested itself to me as the only practice applicable; with such a rigid and inflamed condition of the soft parts, I feel certain that the forceps could not have been successfully employed in the hands of the most accomplished obstetric practitioner. At 11 a. m. I commenced the operation of craniotomy, which occupied an hour. My patient, at intervals, manifested perfect consciousness, at other times was lost to all around her. A disposition to flooding showed itself after delivery, which induced me instantly to introduce my hand into the uterus, and remove the placenta, as I was sensibly alive to the feeble powers of my patient. The fœtus exhibited the first symptoms of decomposition. Ordered a draught, with two drachms of sulphuric ether and forty drops of laudanum in a little camphor mixture. In the evening, the nurse reported

that she had slept during short intervals, but was only sensible on being especially roused to reply. Ordered a draught at bed-time, with one grain of morphia and two drachms of sulphuric ether in camphor mixture.

6th, 8a. m.—Had passed a restless night. Pulse 170; tongue dry; delirium constant, of a muttering kind. Ordered a mixture with camphor suspended in mucilage, liquor ammon. acetatis, tinct. hyoscamus and nitras ether.; a dose to be taken every four hours. Morphia, 1 gr. in a draught, to be repeated at night.

7th.—Had occasional sleep during the night, with headache and intolerance of light and sounds. Tongue hard and parched; skin dry; pulse 160; bowels confined. Ol ricini statum; continue the mixture of yesterday. 10 p. m.—Bowels relieved twice. Night draught, with 1 gr. of morphia repeated.

8th and 9th.—Symptoms continue much the same. I have not been able to produce a lengthened sleep; continue the night draught.

10th.—Passed a tolerably good night, and appears to be going on favourably; the pulse, however, of the same peculiar frequency, viz., 160, as at the commencement. 6 p. m.—Visited my patient, and found her suffering from symptoms of an urgent kind; the temperature of the skin had increased to an excessive degree since the morning; the slightest noise produced alarm and distress; and the least ray of light induced pain in the head and general disquiet; the countenance was crimson red, and anxious in its expression; delirium almost constant; bowels violently purged; lochia suppressed; and the lacteal secretion had never shown itself in the slightest degree, although the mammary gland was healthy, and fully developed; her position uneasy, accompanied with great restlessness of manner, indicative of only partial sensibility to her state; pulse 160. The case, from the commencement, was one which filled me with the greatest anxiety and concern, in consequence of the low state of vitality of my patient, and the exhausted condition of the nervous system; but at no part of my treatment did I feel greater responsibility than now, believing as I do that a depressing line of practice in these cases, either by bleeding or medicines, if misapplied, is never to be redeemed. Here were a set of symptoms, which have been so ably described as the representatives of inflammation, the treatment of which has also been equally emphatically laid down, namely, bleeding, with depressents; thus, with the popular ideas of inflammation, and the fondness for active treatment in the public mind, a young practitioner, with equal horrors as myself of the indiscreet use of the lancet, may often have been forced into such a line of treatment to please the multitude, or to protect himself from censure, in the event of an unfavorable issue to the case.

After a little reflection, I decided upon carrying out the tonic and sedative line of treatment, and, with these views, I ordered two pills, containing one and a-half grains of morphia, five grains of camphor, and two of capsicum, to be taken immediately, followed by decoction of bark, with laudanum, aromatic confection, and nitric acid every four hours.

11th, 9 a. m.—Passed a quiet night, getting occasional sleeps of two hour's duration; bowels still purged, skin moist, pulse 150. Ordered the mixture of bark to be continued, and a draught with one grain of morphia to be taken at night.

12th.—Passed a better night; bowels only acted on once, skin moist. From this time, Mrs. —— advanced favourably, though slowly, to a state of convalescence.

In addition to the weightier circumstances of this case, there are one or two minor points which strike me as interesting in a practical point of view. The first is, the condition of the pulse at the wrist, which manifested a determined frequency for an unusual length of time. My patient's circulation in health was never more than 80; but after her confinement it numbered 160 for three weeks, varying occasionally ten pulsations after the influence of a narcotic, but regaining its frequency as the day advanced. When a substantial diet-scale could with propriety be adopted, the circulation diminished in a very marked manner, but two months elapsed before it came within the range of 100; clearly this was a pulse of debility, as proved by the result.

The next point of interest to me is the condition of the mammary gland; although so highly developed, and my patient, when in health, of a sanguine temperament, yet no trace of any lacteal secretion ever showed itself through her illness; this I have observed in other cases, and I have also observed that, when this is the case, there has been either an excessive lochial discharge, or flooding, which has rendered the system incapable of the production of the lacteal secretion, or scarcely any appearance of lochia, dependent upon a previous state of inanition of the patient, which has impressed the friends and nurse with the idea of inflammation being in the distance. In this case the same cause which gave rise to all the other symptoms must explain the non-appearance of the lacteal secretion.

The cerebral wanderings and excessive watchfulness all showed the prostrate condition of the powers of the constitution, and the difficulty, in certain idiosyncrasies, to be quieted down, when once deranged, into the natural functions of life. Other cases I could instance of the same tendency, and of great interest, but deem those I have cited sufficient to indicate the value I set upon a liberal and protective treatment.—*Lon. Med. Times, June* 21, 1851.

Sanguineous effusion behind the Uterus.—At a late meeting of the Surgical Society of Paris, M. Monod related the following case:—A woman was admitted into the Maison de Santé with severe pain in the pelvic region. This case was first looked upon as one of retroversion of the uterus, but it was soon discovered that a considerable fluctuating tumour existed just behind the womb. Two punctures were made at a little interval, which both yielded blood; the pain, however, did not diminish, and the patient died. On a post-mortem examination, a large sac was found behind the uterus, and close upon that organ; it was divided into two distinct halves, both filled with blood.—*London Lancet, July* 5, 1851.

PATHOLOGY AND PRACTICE OF MEDICINE.

Chloroform in a Case of Poisoning by Strychnine.—Mr. G——, aged about 40, of intemperate habits, took from among some medicines, on the 5th inst., a bottle of strychnine; and supposing it to be morphine, as he said, swallowed a dose supposed to be about one or two grains. In about twenty minutes afterwards Dr. Munson was requested to see him, as he was supposed to be in a "fit." He found him in the following condition:—The whole muscular system rigid; the muscles of the back, and of the upper and lower extremities, rigidly contracted; the head drawn back; articulation difficult; sense of tightness about the chest, perspiration flowing profusely from the face and chest. A number of the physicians of the place came to his assistance. The usual remedies recommended in such cases were resorted to, but without any mitigation of the urgent symptoms. The patient was failing rapidly under the increasing spasmodic action of the whole muscular system. It was now determined to administer chloroform, as death was apparently certain without some relief. One drachm of chloroform was put upon a silk handkerchief, and the patient directed to inhale it. The effect was decisive. The patient (who was at this time in a sitting posture, held so by assistants, who could not move him in the least degree without exciting the most frightful and alarming spasms) requested to be placed in a recumbent position, which was done without exciting the least spasm. The chloroform was carefully administered for some hours, the patient holding the handkerchief most of the time himself, in order, as he said, "to keep off the dreadful spasms." From this time he recovered rapidly, and on the 7th instant was able to leave for home, a distance of six or seven miles.—*Boston Med. Jour.*

MATERIA MEDICA AND THERAPEUTICS.

Solution of Phosphate of Iron and Quinine.—I have much pleasure in directing the attention of the profession to the therapeutical employment of a compound, formed of phosphoric acid, pure quinia, and hydrated peroxide of iron—solution of phosphate of quinine and iron. It was devised by me during the past year, and from an extensive trial of it, since that time, I am enabled to recommend it as a remedy likely to prove highly serviceable in those cases indicating the use of such a combination. As much uncertainty exists respecting the chemical relations of phosphoric acid, and the different bases, it is to the therapeutical and not the chemical value of this compound that I attach importance. I shall avail myself of the earliest opportunitiy of making further observations on the subject.—*Dr. Cattell of Braunston, Northamptonshire, in Lancet.*

New mode of administering Cod-Liver Oil.—M. Loze, a naval surgeon, stated that he had attributed the failures of this remedy in phthisis to its non-absorption; and that, with the view of effecting this, he had combined the oil with a mucilage containing pancreatic juice, which thus forms an artificial chyle. In this form the oil is readily and completely absorbed, and its effect more directly obtained in phthisis.—*London Medical Gazette.*

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ORIGINAL COMMUNICATIONS.

Lectures on Scarlet Fever. By Caspar Morris, M. D., late Lecturer on Practical Medicine in the Philadelphia Medical Institute.

Lecture VII.

While the general character of the *simple* form of Scarlet Fever is sthenic, and, as I have remarked when describing the treatment appropriate to it, will bear depletion better than the other varieties, though never demanding it, the *anginose form* is not so uniform in this respect. In different epidemics it presents every grade of action, from one of acute inflammatory fever, till it is merged, by imperceptible shades, into the low or malignant form. Hence arises the great variety in the modes of treatment recommended by different authors, all equally entitled to your confidence; and the great difference in the mortality in different years, or in the same year at different places. This difference in mortality cannot always be ascribed to different modes of treatment, though this does undoubtedly exert a powerful influence. In the London Fever Hospital it varied, in the course of eleven consecutive years, from *one* fatal case in every

six, to *one* in *forty;* and an equally curious variation will mark the practice of most medical men, not only in the course of years, but even during the same year, in different parts of the same town, or district of country, and in different families. The observation of these facts has caused me to be very cautious in the expression of condemnation of any particular mode of practice. The candid remark of the judicious and upright Dr. Fothergill may be borne in mind with great advantage: "In some cases the disease appears to be of so mild a nature, and so benign, as to require but little assistance from art; persons even recover from it under the disadvantages of unskilful and injurious management; whilst in others the progress of the symptoms is so rapid, and the tendency to corruption so strong, that nothing seems able to oppose it." It is not, therefore, just, always to estimate the advantage of a plan of treatment by the recovery of a limited number of patients. It may merely indicate that the power of nature for self-preservation is sufficiently strong to resist the combined injurious influences of the disease and the treatment. I desire to make this remark with entire candor, and that it should be applied with equal fairness to the treatment I myself suggest, as to that equally strongly recommended by others; while, at the same time, I would assure you that it is not without personal experience of the effect of other plans, that I have adopted my own.

This same general remark as to the limited duration of the original disease, the importance of which I endeavored to impress upon you when the simple form was under consideration, is equally applicable to this. It is of far greater importance, however, to keep it ever in your mind, and to allow it to modify your practice. The greater urgency of the symptoms appears to demand a proportionate increase of the energy of treatment. The local lesions are frequently so severe from the very onset, as to require anxious care; and the influence they exert in prolonging the fever, by their irritation after the primary disease has subsided, is well calculated to render the treatment obscure, and the result doubtful. Few minds are so well balanced as to be able to resist the influence of these circumstances, or capable of such nice discrimination as will enable them to arrange the symptoms and adopt the treatment without improper bias. Not

only does the severity of the local lesions, in many cases, incite to the adoption of a treatment needlessly active, but the fear of the result of these local inflammations is often so great, as to overwhelm the judgment. I have known not a few lives sacrificed to the anxiety to avert anticipated evils, and to cure a condition which art can only *relieve*, while nature herself is working the cure, in the regular course of events. Nor have I any wish to screen myself from the censure of being a participant in such results. The remembrance of too many cases in which I have had reason to regret a too energetic treatment, whether deplетory or stimulating, urges me thus to press upon your attention, opinions which have been formed at the expense of much personal observation.

The occurrence of a local lesion giving rise to the *anginose* variety of Scarlet Fever, does not of itself involve any change in the general principles of treatment already laid before you. In its slightest degree the anginose manifests itself by a slight tenderness about the angle of the jaw, with some enlargement of the lymphatic glands. If the condition of the fauces is examined, the membrane lining the arches and covering the tonsils and uvula, will be found more intensely red, and sometimes slightly œdematous. From this condition the severity of the local affection gradually increases, till it assumes the various appearances formerly described.

The only change in the treatment demanded by this local affection, when there is no tendency to sloughing of the inflamed organs, nor general disposition to prostration of the vital force, is attention to those agents which will afford present relief from the discomfort it occasions. The external swelling and tenderness will yield to the soothing influence of warmth and moisture. When properly applied, this is always grateful, but when done in a slovenly or careless manner, is exceedingly offensive. A flannel cloth wrung out of hot water, and applied with moderate firmness, and of several folds thickness, and then covered with a layer of oiled silk, and that enveloped in a nice napkin, will retain the necessary degree of warmth and moisture a long time. It is lighter than the poultices commonly resorted to, and is free from the smell which renders them offensive, and does not leave the dried deposit which forms around the edges of the cataplasms.

Next to this in adaptation is a thin layer of Indian mush, thoroughly boiled till it forms an adhesive mass, and applied in a thin flannel envelope, taking the same precautions to avoid evaporation. You may think these are matters which may be left to the attention of the nurse; but you will find that not only your own reputation will be increased, by your ability to give minute directions about apparently trifling matters; but, what is of vastly greater consequence, the present comfort of your patients will be increased, and these little things influence, in a great degree, the ultimate result. To no portion of human experience is the line of the satirist more applicable, than to that which comes under the notice of the medical adviser:

> "Let school bred pride dissemble all it can,
> These *little things* are *great* to little man."

Great not only in relation to comfort, but to results.

But while warmth and moisture externally applied are thus important, the internal condition requires an opposite treatment. There is nothing so effectually soothes the internal irritation, and averts the probable results of the excited action of the capillaries of the mucous membrane, as the free use of *ice*. In the same manner as the sponging or ablution of the surface, it acts not only in the relief of the local inflammation but also on the general nervous system. The natural instinct of the patient calls for such treatment, and its appropriateness will commend it to every one ready to throw off the trammels of authority. I had long employed it to great advantage before I was aware that it had been used by any other person, but am happy to be able to fortify my testimony to its usefulness, by the report of Dr. S. Jackson, of Northumberland, which is given in the North American Medical and Surgical Journal. Dr. Jackson deserves, I believe, the credit of first drawing the attention of the profession to its use, through the agency of the press. I direct the ice to be divided into *small* fragments, such as can be easily held in the mouth without dissolving. When thus prepared, if wrapped well in flannel and placed in a bowl at the bedside, so as to be easily accessible, the patient may use it as freely as agreeable. When old enough to perform the act of gargling, iced water is the best article for that purpose. In a large majority of cases I have found this local treatment, joined

to the same general course previously recommended, lead to the entire subsidence of the local symptoms simultaneously with the decline of the primary fever.

Would that I could promise so happy a result in every case, even where the primary symptoms are least threatening. It occasionally happens that ulceration of some part of the mucous membrane occurs, either in the posterior nares or the fauces, and gives rise to a profuse secretion of viscid mucus, or a discharge of an acrid fluid, which spreads the destruction over adjacent parts, and, as I have mentioned already, even excoriates the skin when it is allowed to rest upon it. It is almost equally important to relieve both of these conditions. The latter, by spreading the ulcerative process, adds to and prolongs the irritative fever, while the former very materially increases the risk of a fatal termination by the serious impediment to free respiration which it interposes. The vital powers already prostrated by the depressing agency of the miasm which produces the disease, the blood poisoned by its deleterious influence, the life or death of the patient may depend on the freedom with which air is drawn into the lungs. The nervous force diminished and the muscular power abated, we have only to obstruct the air passages through which the life-giving oxygen is admitted, to cut off the only avenue for hope. How often have I seen a poor child lie with the nostrils—the natural breathing channel—entirely obstructed, the mouth unnaturally open to supply a supplementary avenue for air, yet tossing and struggling in instinctive efforts for fresh air to vivify the blood; while the injected conjunctiva, the upturned eye, and the livid hue, all told how vain was the effort. Though when it has reached this point in the downward course, little hope can cheer our efforts, even then they should not be abandoned, as relief to suffering is within our reach, even though death may finally conquer. Gargling is wholly useless; the seat of the diseased action is beyond its reach, and the barbarous substitute of swabbing is but little more effective, with all the pain it gives to the patient and trouble to the operator. The *syringe* affords a most effectual and very easily applied remedy. When no other was accessible, I have employed a common gill pewter pipe; but the neat glass syringe now used for cleansing the ear is admirably adapted for this ser-

vice. Water alone is not sufficient to inject. A little nice soap, which has no volatile oil in it, may be diffused in the water, in those cases where the irritation of the mucous membrane gives rise to a viscid tenacious secretion; or if this is not effectual in changing the action, a very *weak* solution of sulphate of copper or zinc. Either of these agents coagulates the mucus and facilitates its removal at the same time that it acts kindly on the diseased membrane. In those cases in which the secretion is thin and acrid, I have found simple lime water the best detergent. They should be thrown into the nostril, care being taken to have the head elevated at the time and the person of the child inclined forward, while the direction given to the syringe should be such as will cause the fluid to pass toward the posterior nares, and not toward the cells and sinuses. When the throat is much swollen, the fluid thrown into one nostril will often return through the other, thus effectually cleansing both; in other cases it will be rejected through the mouth. The greatest trouble it causes is some little retching or sneezing, either of which is advantageous to the patient. I have often saved life by this simple resort, and commend it to your notice as of great practical value. The solution of sulphate of copper or zinc should not be employed during the first five days of the disease. They then only increase the irritation and aggravate the suffering of the patient, as well as promote the ulceration they are so adapted to cure in the later stage.

The diet of the patient in anginose scarlet fever should also claim the attention of the physician. During the earlier stage, the remarks made on the simple form are equally applicable here. Water ices, iced cream or chocolate ice, subacid fruits and whey, either frozen or dissolved, are excellent, if used with moderation. As the primary fever subsides, animal broths, and bread and milk are well adapted; still keeping in view the fact that quantity is quite as important as quality. Purging as a curative agent is needless, though it is important to secure a regular action of the bowels, which may be readily effected either by small quantities of calcined magnesia or the use of the neutral mixture. We meet with some cases in which there is a tendency to diarrhœa, caused by the irritation of the acid secretions swallowed by the child. These are most effectually

treated by the magnesia in very small doses, which absorbs the acid and carries off the cause of irritation. It should be followed by suitable doses of Dover's powder or laudanum.

But whilst I thus recommend, as the result of my own observations, in a field by no means limited, a treatment so simple, and by some thought inert, when brought into contest with a disease of so formidable character, I am bound to inform you that there are not wanting many authors, and those, too, of the very highest authority in medical science, who urge a very different plan. General bleeding is not without its advocates, as well among our own medical authors as those of Europe. Even those writers who most recommend its employment, do not hesitate to admit that there are epidemics to which it is inappropriate. Cerebral complications have been thought especially to demand it; on that point I have already delivered my opinion. I have never known a patient to recover from this form of scarlet fever when I employed the lancet. The rapidity of the circulation, the heat of the surface, and the buffy coat on the blood, which have been adduced as indications for bleeding or justification of its use, have all been proved by more accurate observation to be susceptible of a different construction. I do not mean to assert that it is not possible for the disease to assume a character which may demand such treatment. I know it to be capable of changes so extreme, that I can easily believe such may have been its character without my having met with the cases. But even many of those authors who coincide with me in the abandonment of general bleeding, still urge the necessity of the topical abstraction of blood by cups or leeches. This practice is, I think, open to still greater reprehension than the other. Not only is it subject to the same objection on account of its depressing influence, but there is superadded the liability to ulceration of the bites of the leeches or the gashes of the scarificator, which give rise to tedious sores, and often leave unsightly scars, even if the vigor of the patient be sufficient to carry him through the combined injurious influences of the disease and the treatment. But while modern observation has cast a shade of doubt on the necessity for bloodletting in even the pure phlegmasiæ, it has brought still greater discredit on the resort to it in the mixed cases of local inflammation with specific fever. Even quinsy,

which is more closely allied to anginose scarlet fever than any other disease, is rarely, if ever, arrested in its progress by either general or topical bloodletting. While, therefore, there is much to discountenance the resort to these measures, there is, on the other hand, little to invite to their use.

The employment of emetics has been highly commended by many authors, and their use may be vindicated more easily than that of bleeding. The shock given to the nervous system is by some thought to promote the development of the disease. This is at least a questionable assertion. I believe the only mode in which they can act advantageously, is by the discharge of the contents of the stomach, which might, if retained, become sources of irritation, and by the production of that determination to the surface which accompanies the act of vomiting. Antimonial emetics are wholly unsuited. Ipecacuanha is the best article that can be employed; and next to it I should rank the powdered alum, so highly and justly recommended by Dr. Meigs in croup. Purging, beyond the mere evacuation of the bowels, is not only uncalled for, but pernicious. It cannot remove the specific irritation of the mucous membrane of the alimentary canal, and adds another to that already existing. Even Dr. Hamilton, while he lauds highly the advantages of a free purge in the beginning, admits that it is not required subsequently. The recovery of patients after vomiting or purging, cannot be adduced as evidence of the benefit of the practice, for reasons already assigned; and when there are any signs of irritation of the mucous membrane, they are decidedly injurious. Dr. Fothergill, speaking of the treatment of the disease, says: "Bleeding was prejudicial," but with that caution which gives the more weight to his authority, adds, "in general; some admit of it at the first attack, but later it never fails to aggravate the symptoms, and in some cases it appears to have produced fatal consequences. Nor has purging," he continues, "been observed to be more beneficial, and nitrous cooling medicines produce the like effect." Gentle emetics, if administered early, he commends highly, declaring that they often cure the disease, even when the symptoms are most threatening.

It not unfrequently happens that at the close of the first week of the disease, as the primary fever subsides, the pulse loses its

frequency, the skin becomes cool and moist, and the patient languid, with loss of appetite. A very moderate use of quinine in such circumstances is useful. Great care is requisite not to push it too far, either in quantity or the length of time. A few days bring you to the period which is especially liable to inflammatory sequelæ. A return of the frequency of the pulse, and an increase of the languor, will mark the occurrence of this condition, and should cause an immediate suspension of the tonic treatment, and great care about the diet. This is especially necessary, as it is impossible to foresee in which of the organs liable to the secondary affections the mischief may develop itself; and the attacks are so formidable, that it is important to guard against the very beginning of the evil. A cerebral or cardiac inflammation would be materially aggravated by the influence of the quinia. The condition of the urine is also an important means of determining how far it may be proper to pursue the tonic treatment. While that secretion continues abundant and clear, and the skin cool and perspirable, there can be no risk. The interruption of the secretion from either of these eliminating organs, or the deep color or turbidity of the urine, would at once indicate the propriety of suspending the quinine.

It is in these cases that we frequently meet with that very formidable complication, inflammation of the larynx, producing all the symptoms of croup. Even in these cases no benefit will result from depletion, or any other depressing agent; dependent on the extension of the specific inflammation from the fauces, it must be relieved by local treatment alone. Emetics of alum or ipecacuanha are the most valuable of our remedies, and may be repeated as often as the urgency of the symptoms requires; care being taken at the same time to afford proper support, by suitable nourishment and stimulants. One of the happiest results I ever achieved, was in the recovery of a child of about two years of age, in whose case the disease was ushered in by convulsions, which yielded to tepid baths, with cold affusions to the head. The disease then ran its regular course, accompanied with much sloughing of the fauces and uvula, and leaving an exceedingly red ulcer. This I treated with the injections recom-

mended above, and was flattering myself with the expectation of a speedy recovery, when the harsh clangor of a croupy cough sounded like the knell of hope. I procured at once a stick of nitrate of silver, fastened in a quill, and, depressing the tongue, thrust it deep into the fauces, with the design of extending the application to the very verge of the glottis itself. A sudden struggle of the child broke off the caustic from the quill, and, to my indescribable horror, one gulp carried into the stomach of the child about two drachms of the caustic. To fail in one's efforts to cure is disheartening enough,—to feel that those efforts, however well meant, have rendered certain the triumph of death, is like being dragged at the chariot wheel to swell the triumph. Determined not to yield without an effort, and saying nothing of the accident, I called for the salt cellar, which was promptly handed me, and compelled the child to take large and repeated draughts of a strong infusion of the chloride of sodium. This of course produced free emesis, at the same time that it rendered insoluble and inert the poisonous mass thus undesignedly passed into the stomach. Whether the result may be ascribed to the action of the caustic, or that of the saline application to the local disease, or, what is more probable, to the oft repeated vomiting, I am not prepared positively to assert. I am disposed to divide the honor between the two latter influences, providentially, though unintentionally applied. Certain it is that most unexpectedly the child recovered.

But the most judiciously planned treatment, though faithfully carried out, will not ensure a successful result, even in those cases which do not manifest any very unfavorable symptoms at the beginning. The impeded deglutition, the labored respiration, the swollen lymphatics, occurring about the end of the first week, or even sooner, all speak of a condition full of danger, while a hard, quick pulse, which generally accompanies this condition, would appear to demand local depletion for the relief of the local disease. You must not allow yourselves to be beguiled even now by this simulation of inflammatory action. The corded pulse tells of irritative action, but not of one which can be removed by depletion, either local or general. Neither would the resort to blisters be a whit more beneficial. Dependent on

the disease of the mucous membrane, it will only yield as that subsides. Happy indeed were it for the patient if it were certain then to disappear. Too often the inflammation results not only in effusion into the cellular tissue, but also in suppuration, either in that tissue or in some of the glands, leaving one of the results of which we shall speak when we come to treat of the sequelæ. This acute glandular enlargement and effusion will yield more kindly to the continuation of poultices and injections than to any other plan. Iodine and the iodide of potassium have been employed both locally and internally, but I believe without any well attested advantage.

The treatment of those cases in which the eruption appears imperfectly developed from the first, or when, after having been well marked, it recedes, or where the force of the attack falls upon the throat, causing great tumefaction and difficulty of deglutition, must be very energetic. In all these cases, this condition evidently results from the overwhelming influence of the poison upon the nervous system. Whether convulsions, or restlessness, or stupor, complicate the case, or mere languor and exhaustion, all are but varying phases of one condition, and that, a condition which is to be removed by appropriate stimulation; and it is in these cases that the capsicum is productive of the happiest results. It was, I confess to you, with great reluctance, I was first prevailed on to resort to a remedy apparently so little appropriate to the treatment of a disease in which the rapid circulation and heated surface seemed rather to call for remedies which should produce a refrigerant impression; and to force a harsh irritating liquid into a throat already inflamed, was, I thought, little short of a refinement of cruelty. The entire failure of the cooling treatment in such cases, led me to test the opposite course, and I can recommend it with entire confidence. Weak animal broths freely charged with capsicum, may be given with great safety, even to the youngest infants; and though it may not—indeed it rarely does—so far rouse the energies of the system as to cause the full development of the eruptive features of the disease, it will so far excite the vital forces as to carry the patient safely through the regular period. Should there be much local disease, it will derive great benefit

from the passage of the broth over it. I have often administered this simple infusion when the stomach rejected the broth, or when I desired to maintain a more constant local impression. The common formula of a teaspoonful of powdered capsicum, the same quantity of common table salt, a large spoonful of vinegar, and a half-pint of boiling water, is an exceedingly good one. Of this, a teaspoonful may be given every hour or two to a child of five years old and upwards, followed by a small portion of broth, or even wine-whey. Brandy and quinine have not the same beneficial influence in these cases that they exert over those we shall consider hereafter. They oppress the nervous centres instead of relieving the load. Where there is great restlessness I have derived advantage from moderate doses of morphia, given in the aqua acetatis ammoniæ, or from the Dover's powder. Wine-whey having more tendency to promote the determination to the skin, may be given in every case with safety, where the quinine and brandy would be inappropriate. The resort to hot and stimulating baths and irritative frictions, and the revulsive treatment generally, which would naturally suggest itself, has never been followed by any advantage so far as I have had opportunity for observation, and the internal use of carbonate of ammonia has also disappointed my expectation.

Under the plan of treatment thus indicated, I have found the cases in which the eruption was irregular, defective, or even entirely absent, yield quite as large a percentage of recovery as those which are accompanied with the most intense degree of cutaneous inflammation. It is worthy of remark that such cases are less liable to be followed by dropsical infiltration of the cellular tissue, though the convalescence is more tedious and imperfect.

(To be continued.)

Pennsylvania Hospital—*Surgical Wards.—Service of* Dr. Fox.

Cases discharged since July 1*st*, 1851.

	Cured.	Relieved.	Died.	Total.
Abscess of thigh,	0	0	1*	1
Bite of dog,	1	0	0	1
Burns,	0	0	2	2
Concussion of spine,	1	1	0	2
Contusions,	7	2	0	9
Conjunctivitis,	3	1	0	4
Corneitis,	0	1	0	1
Disease of thumb, (scrofulous,)	1†	0	0	1
" of knee,	1	1	0	2
Dislocations 3, viz:				
Shoulder,	1	0	0	1
Hip,	2	0	0	2
Fistula in ano,	1	1	0	2
Fractures, simple, 26, viz:				
Inferior maxilla,	1	0	0	1
Clavicle,	3	0	0	3
Scapula,	0	1	0	1
Condyles of humerus,	4	0	0	4
Forearm, (both bones,)	2	0	0	2
Ulna,	1	0	0	1
Radius,	4	1	0	5
Metacarpal bones,	0	1	0	1
Vertebræ,	1	0	0	1
Femur,	0	0	1‡	1
Patella,	1‖	0	0	1
Leg, (both bones,)	2	0	0	2
Tibia,	1	0	0	1
Fibula,	1	0	0	1
Os Calcis,	1	0	0	1
Fractures, compound, 9, viz:				
Hand,	1	0†	0	1
Fingers,	5	0†	0	5
Leg,	0	1**	0	1
Foot,	0	1	0	1
Toes,	0	1	0	1
Foreign body in nares,	1	0	0	1
Gonorrhœa,	3	0	0	3
Hydrocele,	0	2††	0	2
Inflamed hand,	1	0	0	1
Inverted nail,	0	1	0	1
Iritis, (simple,)	0	1	0	1

* Exhausted by profuse discharge and diarrhœa.

† By amputation.

‡ Complicated with fracture of leg and ribs, and with wound of liver.

‖ Bony union; two months under treatment.

** Amputation of leg was performed; patient removed two days after by a friend.

†† Complicated with disease of testicle.

	Cured.	Relieved.	Died.	Total.
Iritis (syphilitic,)	1	0	0	1
Mania a potu,	0	0	2*	2
Onychia,	1	2	0	3
Rupture of bladder,	0	0	1	1
Swelled testicle,	1	0	0	1
Syphilis, (primary,)	3	1	0	4
" (secondary,)	5	2	0	7
" (tertiary,)	0	1	0	1
Tinea capitis,	1	1	0	2
Tumor of breast,	0	1	0	1
Ulcers,	6	0	0	6
Wounds, incised,	9	4	0	13
" " of throat,	1	0	0	1
" lacerated,	9	3	0	12
" gunshot,	0	1	0	1
" penetrating,	1	0	0	1
" " of abdomen,	1	0	0	1
" poisoned,	1	0	0	1
	91	33	7	131

One of the cases of dislocation of the hip, was of nine days standing, occurring in a stout Scotchman, aged 63.

The dislocation was upwards and backwards on the dorsum of the ilium, and required one hour to effect its reduction.

Patient was discharged well, fourteen days after.

The other case was that of a boy, aged 13 years. He was brought into the Hospital within a few hours after the occurrence of the accident, and the reduction was effected without difficulty.

Discharged, ten days after, well.

Fracture of the spinous processes of the first two lumbar vertebræ. Recovery.

A young woman aged 18, whilst engaged in washing a window in the second story of a house lost her balance and was precipitated on to the pavement.

The accident occurred on the 25th of June, in the neighbourhood of the Hospital, and I saw her within a half hour afterwards. She was suffering excruciating pain in the lumbar region. On examination, the spinous processes of the first and second lumbar vertebræ were found projecting directly backward, and

* Both hard drinkers; admitted for accidents, one with comminuted fracture of the femur, the other with severe gunshot wounds of the face; delirium manifested itself on the second day after admission, and death occurred within ten days.

by pressure on them *crepitus* could be distinctly perceived. There was no paralysis of the lower extremities, nor did any symptoms supervene afterwards to lead to the suspicion that the fracture had extended any further than through the spinous processes—there were no other injuries. Perfect rest on the back was enjoined, and the free use of morphia resorted to for the relief of the pain. Pain subsided toward the close of the following day. At the end of four weeks from the time of the accident, the union of the fragments was very firm—a considerable amount of callus had been thrown out—and the two spinous processes projected a little beyond the natural curve of the vertebral column.

Patient was discharged well, August 1st, thirty-seven days after the accident.

Her recovery was complete.

Penetrating wound of the Abdomen—protrusion of Omentum—its removal—Recovery.

The case of penetrating wound of the abdomen, was attended with protrusion of omentum—the treatment resorted to not being that in ordinary practice, and the favorable result attending it, sufficiently justify a full history of the case.

Mary Ann Lloyd, colored, aged 21, was admitted into the Hospital on Saturday, June 21st, at 11½ P. M., with a stab in the left groin, which she had received half an hour previous, from a person with whom she had some altercation in an Alderman's office. Skin was warm and moist; pulse good; complained of considerable pain. The wound was about three-fourths of an inch long, about half an inch above, and parallel to, Poupart's ligament—a line drawn from the anterior superior spinous process of the ilium to the umbilicus, would exactly bisect it. From it, protruded a piece of omentum of about the size of the palm of my hand, slightly congested, but otherwise healthy in its appearance. Careful efforts were made to return it, and were partially successful; but the restlessness of the patient was such as to force out as much as I would return. The prospect of success caused these efforts to be continued for half an hour, when it was deemed advisable to desist from them; the omentum had then become so much congested that it was not thought even safe to return it by dilating the wound. It was therefore concluded to

cut it off. This was done—having previously passed a double ligature through the mass, close to the integuments, and strangulating it. The strangulating of the omentum was attended with very little pain to the patient. The wound was then closed by interrupted sutures. Within the sutures was included the portion of omentum strangulated by the double ligature. The object of this was, to prevent its return with the ligatures into the cavity of the abdomen. Over the wound was placed a piece of cotton cloth spread with cerate, and retained by one or two adhesive strips. Ordered, Liq. Morph. Sulph. ʒj. To be repeated every two hours, until sleep is induced.

Sunday morning, the 22d.—Required but ʒij. of the solution of morphia to induce sleep, which was tranquil through the whole night. Pulse 90, full and strong; skin, moist and warm; tongue clean: still complains of pain in the abdomen. Ordered, Hydrarg. Chlor. Mit. gr. ij. Pulv. Opii. gr. ss. To be repeated four times during the day. Fomentations with hops to the abdomen. Diet, barley water.

6½ P. M.—Has been dozing all day; does not complain of any pain; abdomen perfectly flaccid and free from tympanitis. Omitted the fomentations. Continued the calomel and opium. Pulse 88—full and strong.

Monday, 23d.—Slept well through the night. Purged slightly by the calomel. Pulse 95, less strong than yesterday. Tongue slightly furred—complains of slight pain in the side opposite to the wound, but of none in its neighborhood. Abdomen perfectly flaccid. Reduced the quantity of calomel—thus,

Hydrarg Chlor. mit.	gr. j.
Pulv. Opii.	gr. ss.

To be repeated four times during the day. Diet, same as before.

Tuesday, 24th.—Rested well through the night. Pulse 85, no pain or uneasiness—mouth slightly sore. Omitted the calomel. Diet, barley water.

Wednesday, 25th.—Still entirely free from pain. Wound has very much diminished in size—there is a slight discharge from the cut surface of the omentum. No tension of abdomen—merely a small ring around the wound, harder than natural. Applied flax-seed poultice—diet, gruel.

Thursday, 26th.—On visiting the ward last evening found

the patient walking about with a blanket over her shoulders, assigning as her reason for doing so, that she was tired of her bed. This morning the edges of the wound show some disposition to slough, otherwise the patient is doing well. Pulse natural, no febrile excitement—no tension of abdomen—appetite good. Ordered full diet.

July 1*st.*—Has been doing well since last report. The slough has entirely separated, leaving an ulcer about two inches long and one inch broad: the ligatures of the omentum came away this morning.

August, 2*d.*—The wound has been healed for some days now, having granulated from the bottom—the cicatrix is small, firm, and linear in form. Patient discharged, well.

ADDINELL HEWSON, Resident Physician.

Pennsylvania Hospital, August 15*th*, 1851.

BIBLIOGRAPHICAL NOTICES.

Quarterly Summary of the Transactions of the College of Physicians of Philadelphia. From May 6*th, to July* 1*st*, 1851, *inclusive.* Philadelphia: Lippincott, Grambo, & Co., 1851.

This number of the Transactions of the College of Physicians, is filled with excellent papers, and must, indeed, be gratifying to all who feel an interest in the maintenance of an independent organ by this venerable institution. We cannot too strongly commend so useful a publication to the notice of our readers; and we have no hesitation in saying, that it presents the greatest amount of valuable original matter, for the terms of subscription, with which we are acquainted.

The present number contains two highly interesting and elaborate communications from Dr. Pepper, of the Pennsylvania Hospital; one presenting a *case of Cancer of the Lungs and Mediastinum*, the other, on *Lemon-Juice as a remedy in Rheumatism;* a very remarkable *case of Hermaphroditism*, by Dr. Neill; a case of *Rupture of the Gall-Bladder*, by Dr. H. Hartshorne; a case

of *Degeneration of the Liver, and Hypertrophy of the Gall-Bladder*, by Dr. Keller; and a case of *Death post partum*, by Dr. Beesley.

Dr. Pepper's paper on the use of Lemon-Juice in Rheumatism, gives us the details of fourteen cases, in which this remedy was employed in the Pennsylvania Hospital. The results which they present, are decidedly favorable to the treatment in question, in "acute uncomplicated rheumatism." And, even in the sub-acute or more chronic forms, it appears to have afforded marked relief in several instances; whilst under no circumstances, was it productive of an injurious result. Dr. Pepper, however, with characteristic caution, observes that

"The number of cases just reported is entirely too limited to enable us to form any positive conclusion as to the curative powers of lemon-juice in this disease, particularly when we call to mind the numerous and sudden changes by which this affection is characterized, whether abandoned to itself or subjected to the various modes of treatment which have from time to time been recommended. It would have been both curious and instructive to have reported, in connection with the above cases, others of a similar character in which the lemon-juice had not been administered; but I have perhaps already wearied the patience of the college, and must hasten to bring these remarks to a close. I would simply state, however, that, during the month of March, of the current year, two cases of acute rheumatism were admitted into the hospital, both of which were treated chiefly by calomel and opium, with colchicum and magnesia; the first, though complicated with severe endocarditis, was fully convalescent by the end of the twelfth day; whilst in the second instance the relief was more prompt, the patient being nearly well by the expiration of one week. On looking over my notes on hospital cases for the last nine years, I also found many instances of acute inflammatory rheumatism recovering in the course of one or two weeks under this plan of treatment; on the other hand, it is true, there were cases of an apparently similar character reported, in which no such favorable results were obtained; and it would be important to ascertain, by further experience, whether, under such circumstances, the 'acid treatment' would be more efficacious. The very favorable reports from abroad certainly entitle this remedy to the attentive consideration of the profession; and, should it be found not inferior to the other plans of treatment, it would at least have the advantage of agreeable flavor, without, at the same time, impairing the general health, as sometimes happens from the use of more heroic remedies."

Dr. Pepper states that, in most of the instances in which the urine was examined, "it was found to be either neutral or much less acid than in health; whilst at the same time, it was unu-

sually clear, and contained but a small amount of lithates; in no instance did it appear to be materially increased in quantity." Dr. Pepper's observations in this particular, coincide with those of Dr. Rees, the originator of the treatment.

Dr. Pepper offers no opinion as to the *modus operandi* of the lemon-juice; excepting that he attaches little influence to the citrate of potash which it contains. We find in a late number of the London Lancet, several cases of acute rheumatism reported, in which Dr. Rees employed citric acid, in place of lemon-juice, with a view of elucidating the question—what agency is attributable to the citrate of potash contained in the lemon-juice? One scruple of citric acid, dissolved in mint water, was administered every fourth hour, after a mercurial purge. He considered that the convalescence of the patients subjected to this treatment, was more tardy than with those treated by the lemon-juice. But this circumstance, he is inclined to think, may have depended on the peculiar state of the weather prevailing in London, this spring, which was very unfavorable to persons recovering from severe disease. In the practice of Dr. Keating, of the St. Joseph's Hospital, Philadelphia, pure citric acid exerted the same beneficial effects as lemon-juice, in cases of rheumatism.

Dr. B. H. Coates, who took part in the debate which was elicited by the reading of Dr. Pepper's paper at the College of Physicians, is of opinion that there is

"An error in the chemistry of the theory or explanation, by which good effects are demanded of the vegetable acids, in the treatment of rheumatism. The vegetable acids are not oxidating substances when introduced into the animal economy; they are de-oxidating or dis-oxygenizing substances. They carry more oxygen out of the animal body than they bring into it; and this loss is supplied at the expense of the blood. It is granted that these substances are never found among the excreta; the matters of which they are composed are, when discharged, combined in the form of carbonic acid and water, either separate, or having the carbonic acid combined with alkalies or lime, found in the composition of the fluids. When converted into carbonic acid and water, the vegetable acids always absorb oxygen, necessary for the composition of the two resulting products.

This corresponds with the chemical theory that gouty matter is in want of further oxidation preparatory to its discharge by the kidneys; and with the usual experience, that vegetable acids render gout worse, or produce it. The analogy of gout to rheumatism, on which the speaker did not then insist, is adverse to the hope of benefit from the use of vegetable acids in rheumatism."

Dr. Coates considers any good effects that may result from the use of lemon-juice in acute rheumatism, to depend entirely on the *sedative* and *refrigerant* action of the remedy, and to be effected in spite of its deoxidating action. The modus medendi, he deems the same, as with "the moderate and rational use of bleeding and of the nitrate of potassa." And these views he finds agree with the observations of Dr. Pepper, who derived little advantage from the lemon-juice in *chronic*, but only generally or frequently so in *acute* rheumatism. "Acute rheumatism is rheumatism accompanied by fever; and the use of sub-acid drinks, for the sake of their sedative effects in fever, is familiar, and has descended to us from former ages. * * * * * * * In this, way Dr. Coates sees no impediment to lemon-juice being serviceable in acute rheumatism, doing some harm, but more good."

An Address on Medical Jurisprudence, delivered before the Fellows of the Massachusetts Medical Society, at the Annual Meeting, May 28, 1851. By DAVID HUMPHREYS STORER, M. D. Boston, 1851.

This address is a well-timed and pointed appeal in behalf of the claims of *Medical Jurisprudence* to an increased share of professional attention. Dr. Storer justly observes, that, while

"With all the other departments of the profession, the young man, presenting himself for his final examination, may be sufficiently well acquainted, to satisfy the Faculty before whom he appears, that he is competent to commence the responsibilities of his career, upon the subject to which I have referred, in some of our schools he is *not examined:* not a question is asked him. He may have listened to a few general lectures during his pupilage; but he has pursued no methodical course of instruction,—he has studied no accurate, reliable author,—he has had no recitations upon the subject; without which, in this, as in all other branches, lectures are of comparatively very little value. And it is only when he is summoned to give his testimony in a Court of Justice, that the young physician finds himself forming his opinion, and searching for authorities to support it; or perhaps, I might with more propriety say, collecting published facts upon which he may found an opinion."

It is, indeed, surprising that the important subject of Medical Jurisprudence should be so completely over-looked in some of our Medical Schools. And we cannot but welcome with

satisfaction this appropriate discussion of a very desirable reform.

The following forcible remarks on the toleration of irregular practitioners, from Dr. Storer's address, we commend to general perusal. They are no less applicable to our own meridian than to that of Massachusetts:

"Much yet remains to be done to perfect our system of medical police. In the year 1781, several of the most distinguished physicians of the State associated themselves together, and obtained an act of incorporation from the Legislature, under the name of the 'Massachusetts Medical Society.' By their charter, they are expected 'from time to time to prescribe such a course of medical and surgical instruction, and such qualifications as they shall judge requisite for candidates for the practice of physic and surgery, and shall cause the same to be annually published.' This course is pursued; and well-educated young men yearly present themselves to the proper officers to be examined, and, proving themselves to be competent, are allowed to become members of the Society. But we look in vain in the chapter 'concerning the practice of physic and surgery,' in the State's laws, for a restraint upon irregular practitioners,—for a prohibition, that none save well-educated men, and such as have shown their capability by undergoing a thorough examination at the proper tribunal, shall be allowed to act the part of a physician or surgeon. And the young physician, a member of the Massachusetts Medical Society, who has been able by the most strenuous efforts,—by great self-denial,—oftentimes by embarrassing himself for years, in a pecuniary point of view, to reach the goal for which he has so long and so ardently striven, finds, upon entering the threshold of his profession, that he is surrounded by ignorant, uneducated, unprincipled men, who have no hesitation in publicly proclaiming that they can cure all diseases; and that, too, without resorting to any of those remedies against which they know the people have an insurmountable objection,—men who deluge the community with their hand-bills and certificates of the most remarkable success, prepared for the occasion, or testified to by bribed or irresponsible persons.

In no respect is our medical police more inefficient than in this. The evil I speak of has become a public nuisance, and as such it should be treated. A great portion of every community are exceedingly credulous,—believing most fully whatever may be stated, which, to an enlightened mind, savors of impossibility. The more ridiculous and improbable the accounts, the more readily do they attract attention; and the greater the audacity of the narrator, the more certain, for a period, is he of succeeding.

I have known a delicate female, wasted with phthisis, and requiring all the sympathy and attention of her most devoted friends, persuaded to place herself under the care of one of those wretches who blasphemously warrants a cure, and subjected to the most active treatment that

could be devised. A few days only were required to free her of her misery.

I have seen a strong day-laborer, treated for inflammation of the bowels with the most stimulating drinks, crying in his agony for cold water, and supplied with potations of rum and cayenne, and compelled, in his intervals of repose from the most acute suffering, constantly to repeat the dose.

A few years since, a villain, who was said to have graduated from a Southern State prison, practiced in our metropolis with immense success. Mercury and venesection, in his hands, controlled all diseases. The former in spoonful doses, and the latter to the utmost limit of the patient's strength, were employed indiscriminately. To use his own words, openly expressed and openly boasted of, "he had drawn barrels of blood.' Gross as were his proceedings, numerous as were the victims of his malpractice, there he remained outraging the community, until the relatives of a patient he had imposed upon and ruined made a public exposition of the case.

But why should I adduce individual instances to prove my position, when, with others equally striking, most of you are undoubtedly familiar? Besides, the physician, as such merely, can do but little in this hoped-for reform. However anxious he may be to do his duty as a good citizen, to exhibit the villainy which exists on the one hand, and the unavoidable misery consequent upon it on the other, but few can appreciate his motives, or will give him credit for disinterestedness; and he is literally compelled not only to see the grossest impositions inflicted upon his fellow-men, but to feel also, that any interference on his part is the surest means of increasing them. It should be the duty, therefore, of those whose education and condition in life enable them to observe and comprehend the existing evil, to endeavor to remedy it. The better part of the community should act in unison upon this subject, and then the object could be accomplished."

Lectures to a Candid Inquirer, on Animal Magnetism. By William Gregory, M. D., F. R. S. E., Professor of Chemistry in the University of Edinburgh. Philadelphia: Blanchard & Lea. 1851.

This book is a lamentable specimen of folly and credulity, from a quarter whence better things were to have been expected. It is, indeed, humiliating to find a person who occupies the professional and scientific position of Dr. Gregory, assuming the championship of charlatanism, and lending the sanction of the venerable university with which he is connected, to what all right-minded members of his profession view with unmingled contempt

and scorn. We really cannot understand what the professional feeling of the ancient Delphos of medicine can be, when the Professor of Chemistry in the University takes up the mantle of Mesmer, and the President of the College of Physicians* openly avows himself a disciple of homœopathy.

Dr. Gregory's book is, we are bound to say, apparently written in good faith and candor; and we must give him credit for being a true believer. He betrays, however, a degree of credulity, which in a man of his pursuits and presumed train of thought, is, indeed, astounding; not only admitting and defending every variety of the mesmeric humbug—clairvoyance, phreno-magnetism, and all—but gravely narrating and adopting the most monstrous stories, a belief in which overthrows every received opinion, and implies a rejection of all knowledge, natural and revealed.

It would be absurd to deny, that the influence of strong-minded upon weak-minded persons is capable of producing, under certain circumstances, a train of irregular nervous phenomena, which we cannot with entire satisfaction explain. These phenomena have been seized upon and made the basis of the most reckless pretensions and falsehoods, which have been again and again exposed, and as often revived. It is useless to continue the task of unmasking these delusions, for argument and reason have no weight with the excitable and weak-minded persons who entertain them.

We give some samples of Dr. Gregory's twaddle and silly stories. He proposes the name of *odyle* for the principle heretofore termed animal magnetism, which he assumes to be "universally diffused, like heat, light and electricity." Like them, "it tends to a state of equilibrium, and its external manifestations seem to depend chiefly on the disturbance of this state of equilibrium." While ranking, however, *odyle* with the known imponderable agents, he has the grace to admit "that we know comparatively little of the laws by which it is regulated," particularly, as "hitherto observers have not been able to examine the most important facts by the aid of their own senses, but have had to trust to the sensations of others." It is also admitted, that "we do not yet possess any means of collecting, accu-

* Dr. Henderson.

mulating and concentrating the odylic force, as we can do in the case of magnetism and electricity." "Nor have we yet obtained a convenient and accurate means of measuring the quantity or intensity of odylic force."

As an apt conclusion of this rhodomontade, we select one from numerous cases illustrative of "sympathetic clairvoyance," which Dr. Gregory relates, as entitled to implicit credence. "Sympathetic clairvoyance" is the power of reading the thoughts or perceiving the state of health of persons *en rapport* with the sleeper. And the relation in question is established either directly by contact, or indirectly by means of their writing or a lock of their hair! By the aid of handwriting, one of Dr. Gregory's *clairvoyantes* is made to detail the thoughts and actions of persons of various times and countries, including Mary, Queen of Scots, and other notabilities. The following pretended account of Sir John Franklin is, we must say, the most impudent specimen of humbug we have ever met with. And we believe that information received since the publication of Dr. Gregory's book, leaves little doubt that, far from Sir J. F.'s having been "met and relieved" last winter, his ill-fated expedition had long previously been destroyed.

"It is pretty generally known, that this clairvoyante was tried with the writing of Sir John Franklin, and a part of what she said has appeared in the newspapers. I had the opportunity of becoming acquainted with what she did really say, and, although of course the greater part of it cannot be verified until the return of Sir John, yet I am bound here to testify, although she has probably mixed up and confused many things, which we have not the means of distinguishing, that E. has said nothing concerning him which may not prove correct. It appears that some clairvoyants, of whom I know nothing, went so far as to predict the return of Sir John during last autumn. If such predictions were made, by genuine and honest clairvoyants, I conjecture that they have been of that class, who are strongly affected by sympathy with the feelings and wishes of those who consult them, which feelings and wishes they, as it were, reflect. But this is not the case with E. She has made no prediction in the matter, but has simply, at various times, with the aid of Sir John's handwriting, gone, in her phrase, to see him. She was not told, and does not, I believe, even yet know, whose writing it was; but she found the writer in one of two ships, fixed in ice, and surrounded with walls of snow. These ships she first saw in the winter of 1849—50, I believe; I saw several of Dr. Haddock's letters about it in February and March, 1850. Since E. had been right in so many cases at a distance, it was proba-

ble that she was also right in this one. She described the dress, mode of life, food, &c. of the crews. She saw and described Sir John, and said that he still hoped to get out, but was much surprised that no vessels had come to assist him. She frequently spoke of his occupations, and when asked the time of day, found it either by looking at a time-piece in the cabin, or by consulting Sir John's watch. During the winter and spring of 1849—50, and part of the summer of 1850, she uniformly indicated the same difference of time, which I cannot at present give precisely, but which was nearly seven hours. At whatever hour she was magnetised and sent there, she always made the same difference. Nay more, when the time there was nine or ten A. M. (four or five P. M. at Bolton) she would say that such was the hour, but that it was still dark, and lights were burning in the early part of summer. Now it is quite absurd to suppose that this totally uneducated girl has any notion of the relation of longitude to time, or of the difference between an arctic day and one in our latitude. E. also being shown the handwriting of several of the officers of the expedition, found and described them. One was dead (shelled, as she said,) when she was asked. Another, at a later period, was dangerously frostbitten, but recovered. She said, that in one of the ships the provisions were exhausted, but that the other contained provisions. She described the fish, seals, and other animals hunted and killed for food and oil by the crews. Of, or rather to, one officer she said that he was the doctor, although not dressed like a doctor, but like the rest, in skins; that he was a first-rate shot, and was fond of killing animals to preserve them. (This is really the case with Mr. Goodsir, whose writing she was then examining.) She added a multitude of curious details, for which I have no space, and they will no doubt be published by Dr. Haddock. But I may mention, that on a Sunday afternoon in February 1850, she said it was about 10 A. M. there, and described the captain (Sir John) as reading prayers to the crew, who knelt in a circle, with their faces upwards, looking to him, and appearing very sorrowful. She even named the chapter of St. Mark's gospel which he read on that occasion. She also spoke, on one occasion, of Sir John as dejected, which he was not before, and said that the men tried to cheer him up. She further spoke of their burning coarse oil and fish refuse for warmth, and drinking a finer oil for the same purpose. All this time she continued to give the same difference of time, from which the longitude might be calculated. This time, seven hours, or nearly, from Bolton, gives a west longitude of about 100° to 115°, which corresponds very well with the probable position of Sir John. But at a later period, all of a sudden she gave a difference of time of somewhere between six and seven hours, indicating that the ships had moved eastward. She was not, after this, quite so uniform in the difference of time as before, and seemed not to see it so clearly; but she persisted that they had moved homeward, and if we take about 6½ hours as the later difference, this would indicate a longitude of about 97° 30′ W. After this change, she also said that Sir John had been met and relieved, and has always since then seen three ships, which, for a long time past, are said by her

to be frozen np together. The last observation of which I have heard, 17th February 1851, gave a longitude of 101° 45′ W. At the same time, from Captain Austin's writing, which has also been frequently tried, she gave for him the longitude of 95° 45′ W. She does not know whose ship it is, that according to her, has met with Franklin, but she still speaks of three ships together. I should add, that when E. has been sent there at such an hour and season that it was night in those latitudes, she has, quite spontaneously, described the aurora borealis, which she once saw, as an arch, rising as if from the ground at one end, and descending to it again at the other. From this arch, colored streamers rose upwards, and some of these curved backwards. She was much surprised and delighted with it, and asked if that was the country the rainbow came from. She had never been told anything whatever about the aurora, and knows nothing of it."

Elements of General and Pathological Anatomy, presenting a view of the present state of knowledge in these branches of science. By DAVID CRAIGIE, M. D., F. R. S. E. Fellow of the Royal College of Physicians, of Edinburgh, &c. &c., *Second edition, enlarged, revised and improved.* Philadelphia, Lindsay and Blakiston, 1851.

The new edition of Dr. Craigie's admirable work comprises all that was contained in the previous issue, with such rectifications as the advances of the science rendered necessary, with the addition of two new books, one on the structure and morbid state of the glands, and the other on the structure and morbid states of the lungs and heart.

To those who are familiar with the previous edition, we need say nothing in commendation, its merits being fully recognised. In the work before us, the same arrangement, based upon the distinctions of the component tissues of the animal body as derived from the similitude and difference of their anatomical character, and which was so advantageously used in the first edition, is maintained. The object of the author to communicate precise and useful information in a perspicuous and methodical manner has thus been accomplished, and the lover of this department of science, will find prepared to his hand, an accurate representation of all that is known in it.

Of Happiness in its relations to Work and Knowledge. An Introductory Lecture delivered before the Members of the Chichester Literary Society and Mechanics' Institute, October 25th, 1850, *and published by their request.* By JOHN FORBES, M. D., F. R. S., Physician to her Majesty's Household. Philadelphia: H. Perkins. 1851.

Of every creature under heaven, the unceasing demand has always been "who will show us any good?" Every avenue to happiness is therefore thronged with earnest seekers for that "great good," and every prophet who professes to have seen it, and to be able to indicate to others the course in which it may be pursued with reasonable hope of success, is sure of an anxious crowd of followers. Unfortunately, all are too prone to think it lies in some other direction than that in which their own path leads them, and are, therefore, ready to bolt over every hedge and ditch that bounds their regular career, in hope of avoiding rough places they see in prospect, or the recurrence of difficulties which they have already surmounted at an expense of toil they are reluctant to feel liable again to exert. More attractive works than "searches after happiness" could not present themselves. Yet few who are longing for it will think that its "Relations to Work and Knowledge" are so intimate as are represented in the Essay on this subject, from the pen of Dr. Forbes, whose title stands at the head of our notice. The inimitable Flaccus, when looking back from the highest point of literary honor and elegant ease, upon the scene of earlier joys on the paternal farm, could assert of those who cultivated the fertile vales of Italy, "Nimis beati si sua bona norint." And the poet philosopher, from the chair of a Scotch University, could announce a truth which first fell upon our ears, in the short intervals between toil, afforded to a half-grown boy on a farm cultivated by the personal exertion of the family:

> "From labour, health, from health, contentment springs;
> Contentment opes the source of every joy."

But, unfortunately, these and the numberless other testimonies to the effect of labor in promoting that happiness we all desire, come from sources which are liable to question; as the witnesses do not give that unerring test of confidence in the truth of their

own teachings, which practice furnishes, but unfortunately, must be comprised in that large class of teachers, who "point the way they never mean to go."

Yet in nothing do observation and practical philosophical induction more accurately coincide in their teaching. The energetic activity of early life, whether of the lower animal, or that connecting link of the animal and spiritual existences, man, displays itself in exertion, for which no motive can be conceived, except the mere gratification which arises from putting forth of power. Who does not accord to this period the epithet by which it is universally recognized, of "Happy Childhood"? The very memory of it is "redolent of joy and youth," and casts its reflected light with softened rays, over the else dim evening of mortal existence, and converts the very vapors of the approaching night into trophies of beauty as they float around it. But who would, for a moment, dream of the happiness of children separate from exertion? Every power, mental and physical, is brought into active play; perceptive, imaginative, reflective powers, are all busy. Nor is that combining power, by which all are brought to bear upon some effectual result, held in abeyance for future use. How many abortive schemes are brought to the test of actual experiment! How quickly is each unsuccessful effort followed by another and another still!

In manhood, too, we ever find that the sanguine temperament which retains most resemblance to youth, is most productive of available enjoyments to its possessor. But it is not from observation only that we derive the knowledge of this truth. It must be so from the necessity of the case. The fitness of things requires it. Toil, mental and physical, is required to develop the resources which are treasured up in the bosom of created matter, for the benefit of animated nature; and, whether it be the uncertain soaring of the butterfly on gaudy wing, the direct flight of the bee to the treasured nectar, or the combined mental and corporeal effort of man to bind the lightning to his service, and bring the winds into subjection to his power, active effort, positive toil, are everywhere made necessary to securing that which is appropriate to the support of each grade in animal existence. Even rest can have no sweetness unless preceded by the labor which requires its refreshment.

Happiness is not found in any extent of acquisition, and this is as true of mental as of physical treasures. The philosopher who should attempt to retire on a competency of knowledge, would present a spectacle quite as pitiable as that afforded in the pages of Dr. Forbes, and too often witnessed by wary observers, of the retired mechanic, merchant or professional man. It is only as knowledge attained affords a new point on which to rest the ever active mental lever, and move fresh obstacles to onward progress, that it confers happiness; and the moment we reached the point beyond which nothing more was to be known, we should be as wretched as

> "He who his tiara tore,
> And wept for want of other worlds to conquer."

Dr. Forbes, lecturing before a body which prohibits the introduction of religion or politics, is careful to avoid treading on ground which might be considered questionable, from its relation to either subject. The only point in which we are disposed to hesitate in adopting his views, is to be found where he considers the relation between labor and happiness so intimate, that even vice may not separate them. At least, such is the construction of which we think his language is susceptible; though writing, as we do, without access to the pamphlet, merely from the impression made by a careful perusal, we are unable to quote it accurately. There certainly is a temporary gratification of some individual passion or desire which may be said to afford pleasure. But we question the propriety of that definition of happiness which would describe it as merely prolonged pleasure. It is one of those things which it is more easy to comprehend than to explain. It is so intimately allied to the sensations and emotions, that it is difficult to bring it within the scope of verbal definition. We should be inclined to assert, that, while pleasure results from the healthful exercise of each of the varied organs of the body and faculties of the mind, happiness is the aggregate result of the combined and harmonious action of the whole. Its degree varies in proportion to the harmony which is maintained, and is higher and more refined just in the degree in which the nobler elements of our compound being are allowed

their proper preponderance. While, then, we recognize a Creator, by whose wisdom all things are arranged as

"Parts of one stupendous whole,"

we must assume that *he* is likely to have the largest amount of happiness, who best fulfils the duties of the position in the world to which he has been assigned; and with the retrospective poet, who sings of the happiness of earth from the seats above, admit that "Where duty went, she went." The heathen poet gives to "Mens sibi conscia recti," the highest point in the scale of enjoyment.

When, then, we regard man as a compound creature, and refer to his animal, intellectual, and moral endowments, we must take the ground that each of this series of faculties must be brought into actual exercise, to open every avenue of enjoyment which is his privilege; and, also, that the highest enjoyment must be commingled with the nobler faculties. The man who sinks his intellectual and spiritual nature, may attain to animal enjoyment. He that cultivates his intellectual power, will add to this the higher gratification of intellectual delight. But he who, not unmindful of these, roams abroad through the fields of regulated animal enjoyment, and soars, at will, into the higher regions of intellectual space, realizes that there is beyond, an unlimited expanse, filled with suns—of some of which the light twinkles in the blue serene, while of others, no ray has yet travelled down to our dull planet,—and has a source of enjoyment opened up to his contemplation, which leaves far in the dim distance of earthly shade, the highest point to which the devotee of animal or intellectual pleasure has ever attained. *Perfect happiness is to be found in the full play of* ALL *the powers of man.*

Although not strictly within the limits of criticism in a Medical Journal, we have been induced to bring the essay whose title heads this article before our readers, and to commend it to them as a chaste and classical production of one whose name has long been associated with the literature of our profession. And we offer our thanks to Mr. Perkins for placing it within the reach of all. While the American edition of this little work, is worthy of much praise for its neatness, we must be allowed to enter our solemn protest against the curtailment of the original,—or rather against the reason given for the omission of a part. It is a libel on the

reading community of America, to infer that it will pardon the leaving out of the "Latin." Print it, and let him who can, read, and let it stand as an incentive to him who can not, to put forth his "Labor" to acquire that "Knowledge," and in doing so he will find "Happiness." **

The Microscopist; or a complete Manual on the use of the Microscope: for Physicians, Students and all lovers of Natural Science. With Illustrations. By JOSEPH H. WYTHES, M. D. Philadelphia: Lindsay & Blakiston. 1851.

The above is the title of a neat duodecimo volume of one hundred and eighty-two pages, intended to fill a deficiency long felt by those desirous of pursuing microscopy, yet who were unable to obtain access to the more elaborate treatises on the subject. It contains fourteen closely printed chapters, and is handsomely illustrated by wood engravings. A brief enumeration of the contents will show the amount of material contained within its limits. Chapt. I. The history and importance of microscopic investigation; Chapt. II. The microscope; Chapt. III. Adjuncts to the microscope; Chapt. IV. How to use the microscope; Chapt. V. On mounting and preserving objects for examination; Chapt. VI. On procuring objects for the microscope; Chapt. VII. Test objects; Chapt. VIII. On dissecting objects for the microscope; Chapt. IX. The cell doctrine of Physiology; Chapt. X. Examination of morbid structures, &c.; Chapt. XI. On minute injections; Chapt. XII. Examination of urinary deposits; Chapt. XIII. On polarized light; Chapt. XIV. Miscellaneous hints to microscopists. It will thus be seen that the student and beginner have presented to them in a cheap form an amount of matter that, we are sure, will whet their appetites for the more elaborate treatises on the various subjects; and if they be true lovers of the science, they will not stop until they have mastered all.

In glancing over the chapter on minute injections, our attention was arrested by one or two matters of detail, wherein slight inaccuracies have occurred. For instance, on page 139, the author, in describing the "chemical process" of making minute injections by throwing into the vessels first the solution of bi-

chromate of potass, and then following it by an aqueous solution of acetate of lead, describes it as due to M. Doyere, and first published in the *Comptes Rendus* for 1841. In the number of the American Journal of Med. Sciences for Aug., 1833, p. 353, the author will find a paper by Prof. Horner, in which he describes a mode of making fine injections by the use of solutions of sulphate of iron and prussiate of potash, as well as that by chromate of potash and acetate of lead. The suggestion of their use is there credited to Dr. Goddard of this city. Its assumption by M. Doyere is a fair illustration of the story of Columbus and the egg! Again, on page 140, he quotes Dr. Goadby's paper upon the same process with the addition of gelatin, which was copied into this journal, with the corrections of Dr. G., in March, 1850, wherein Dr. G. "suggests the substitution of the *nitrate* for the *acetate* of lead, as we would then have, in the liberated nitrate of potash, a valuable auxiliary in the process of preservation." If we are not very greatly mistaken, Dr. Goadby's own experience now will controvert this, as the nitrate of potassa dissolves the chromate rapidly, and in a few hours destroys the injection.

One other point, also, and we have concluded all in our notice that is not praise. On page 141 it is said that another plan has been *suggested* (the italics are our own) by Dr. Goddard, viz., that of suspending finely levigated coloring matter in sulphuric ether and injecting the fluid into the vessels. The above-mentioned plan has been most successfully *used* by Dr. G., as well as by many others in this and other cities, and is therefore a *settled fact*, and not a mere suggestion. The author's failure in its use, we suspect, arose from his not using ether enough, under which circumstances it will sometimes clog up the vessel from the too early deposition of the coloring matter. The original paper, with full directions, will be found in the Examiner for Dec., 1849.

With these one or two exceptions, we have derived sincere pleasure from the perusal of this little work, and we earnestly commend it to all who are desirous of obtaining information in this most interesting and useful department of medical science.

Minutes of the Proceedings of the Medical Society of the State of Georgia, at its second Annual Meeting, held at Atalanta, on the 9th April, 1851. Savannah, 1851. pp. 30.

The late meeting of the Medical Society of Georgia appears, from the "Minutes of the Proceedings," to have been well attended, and to have passed off with much harmony and spirit. Dr. Arnold, of Savannah, was chosen President, with Drs. Means and Campbell, as Vice Presidents; Drs. Quintard and Nottingham, Secretaries, and Dr. Alexander, Treasurer. Standing Committees on *Medicine*, *Surgery*, *Obstetrics*, *Hygiene*, and *Indigenous Botany*, were appointed, with Drs. Bulloch, Campbell, Miller, Stewardson, and Quintard, respectively, as Chairmen. Appended to the transactions of the Society, are an abstract of a report on "the character of Education necessary for the Physician," by Dr. Ford, and an address by the President, Dr. Arnold.

Dr. Ford's recommendations on the subject of the preliminary education which should be required of Medical Students are elevated and judicious. He dwells strongly, however, on the necessity of legislative interference to attain any desirable reform in this particular.

"Whilst the Committee entertain the opinion that of all the subjects which have occupied the attention of the National Association, there is none of equal importance to this,—they are utterly at a loss to make any distinct propositions on the subject. The hopelessness of any efficient measures to accomplish this end, within the jurisdiction of our Society, arises from the opinion that the root of the evil lies far beyond our reach—it is to be found in the absence of all legislative protection of the profession, and the positive recognition by statute of every kind of practitioners of Medicine. With this legislative invitation to ignorance, incapacity and worthlessness, to come in and swell the ranks of our profession, and with that easy courtesy of society, through which any may attain the highest title of the profession, any attempt to demand a good general education as a qualification of pupilage, either in private offices or in the Medical Colleges of the State, would but increase the evil."

These views are certainly sound. *Reform* is an idle word, until the regularly educated practitioner is sustained by the strong arm of the law. And we believe that united and determined effort on the part of the profession, can obtain from our State

Legislatures the legal protection which is necessary to the improvement of our body. The concert of purpose and action on which the accomplishment of this result depends, will, we trust, grow out of the State organizations which have been so auspiciously brought into existence by the National Medical Association.

Dr. Arnold's address on "the reciprocal duty of Physicians and of the Public towards each other," is a manly and sensible effort, which cannot fail to have the best effect both in and out of the profession. He takes no half-way ground in his requirements from aspirants to the study of medicine, but boldly proclaims the opinion, that a thoroughly liberal preliminary education is the only basis upon which proper medical attainments can be built. "At the very least, in addition to a thorough English education, he would require from a young man undertaking the study of medicine, that he should be well versed in the Greek and Latin languages." In commenting on the duties of the Public towards Physicians, Dr. Arnold alludes, with admirable force and temper, to the many difficulties which popular prejudice throws in the way of professional improvement and advancement—the impediments to the study of practical anatomy—the opposition to the registration of births, marriages and deaths—the legislative privileges granted to every description of quacks, &c. We should be pleased to have room for his remarks on this point entire, and we trust that his address will have a general as well as professional circulation.

THE MEDICAL EXAMINER.

PHILADELPHIA, SEPTEMBER, 1851.

The Medical News and Library, for August, attempts to show that the editorial remarks in our July number, in reference to the action of the National Medical Association upon the report of the Committee on Obstetrics, were predicated upon a misconstruction of the course actually taken. The News gives the following version of the occurrence:

"After the report of the Committee on Obstetrics was read, a delegate stated that some of the statistics referred to in the report were not reliable, and on one or two other points comments were made by other gentlemen. Thereupon the chairman of the committee requested that the report might be referred back to the committee for correction; and, on motion of Dr. Robertson, the report was recommitted. This course was strictly parliamentary, and the Association could not refuse the committee permission to make such alterations as subsequent information induced them to believe to be proper. They were the responsible party, and the judges in the matter, not the Association. The next morning the report was again presented, with some explanations, and with the statement that certain parts had been erased."

We find, however, upon careful examination of the various reports of the *Proceedings*, including that furnished in the June number of the News, that our cotemporary is quite in error in throwing the responsibility of the transaction upon the Committee on Obstetrics. The following extract from the official report of the *Proceedings*, is affirmed by Dr. Robertson, in a pamphlet which he has lately issued, to be the only accurate and authentic report published:

"Dr. Storer, of Ms., Chairman of the Committee on Obstetrics, presented and read the report of the Committee.

"On motion of Dr. Robertson, of South Carolina, the report was recommitted to the Committee, and made the special order for the morning session."

And Dr. Robertson informs us that:

"At the time of making this motion, he stated distinctly, that it was made to give the chairman an opportunity of striking out the statistics of Dr. Ramsay, as it had been asserted, on the most undoubted authority, that they were not reliable."

The motion of Dr. Robertson, therefore, as *adopted* by the Association, was precisely an instruction to the Committee on Obstetrics to strike out from their report statistics which the Association deemed unreliable. We really cannot understand how our cotemporary could assert that "the Association expressed no opinion on the subject."

We are placed, by our cotemporary, in the position of "censuring the Association." This is affixing an application to our remarks which was neither called for nor warranted. And we must beg our cotemporary not to give unnecessary point to our language. We certainly expressed regret at what appeared to have been a hasty proceeding at the Charleston meeting, the full bearing of which could not have been appreciated. And, without intending the slightest disrespect to the Association, we must re-affirm our previous impressions. We cannot see the propriety, or justice, of calling in question the veracity of an absent person, (who had in no way obtruded himself upon the notice of the Associa-

tion,) upon vague conjectures, and indefinite surmises. And we are satisfied that, even if the statistics in point could have been fairly *proven* to be exaggerated, it would have been far wiser to have avoided this public scandal and altercation. Besides, there are grounds for attributing the movement against our correspondent to pique growing out of a family feud. Personal assaults generally spring from personal animosities, and seldom advance the ends of truth and justice.

MONUMENT TO JENNER.

A Committee, of whom Dr Conolly, of Hanwell, is Chairman, and George Vere Irving, Esq., Hon. Secretary, has recently been formed, with a view of raising subscriptions for the purpose of erecting a bronze statue of Dr. Jenner, by Wm. Calder Maxwell, A. R. A., to be placed in some public situation in London, as a tribute *from all nations* to the memory of that distinguished philanthropist and eminent benefactor of mankind. With this view, a number of prominent individuals, at home and abroad, have consented to serve on the Committee, and an anxious desire is expressed that the funds of the proposed undertaking "should flow from persons of every station in society, and they, (the committee,) will, therefore, be happy to receive the smallest as well as the most liberal donations."

In our next number we may be able to state further particulars, with the names of those in this country who have consented to serve on the General Committee, and to whom subscriptions may be paid.

OBITUARY.

Died, at Wilmington, N. C., on the 27th of June last, Dr. GEORGE LILLINGTON, aged 24 years.

Dr. Lillington, whose early death is recorded above, was a young man of high promise and brilliant prospects. He fell a victim to a typhoid fever, contracted during fatiguing professional occupations. He was ardent and enthusiastic in the pursuit of knowledge, and warm and generous in his friendships. His preceptor offers this brief tribute to his memory.

MEDICAL NEWS.

MEETING "OF THE MEDICAL ASSOCIATION OF WESTERN PENNSYLVANIA AND EASTERN OHIO."—Pursuant to previous notice, the above named organization held its second meeting in the Masonic Hall, at Sharon, Mercer Co., Pa. The Association having been called to order by the President, DR. JOHN BASKIN, of Mercer, the minutes of the pre-

liminary Convention held in Mercer, Pa., in May last, were read and approved.

The committee to whom had been entrusted the preparation of a Constitution and By-Laws for the Association, reported.

The report was received, and, its several sections having, on motion, been separately considered and voted upon, it was finally adopted and ordered to be transcribed into a book proper for the purpose, and the names of the members of the Association to be subscribed thereto. The preamble and the 1st and part of the 2d article of the constitution as adopted, specifying the objects, the title and the qualifications requisite for membership in the Association, are as follows, viz: "WHEREAS, We believe that the interests and prosperity of the medical profession, the progress and elevation of medical knowledge and science, and the welfare, health, and interests of the whole community, require a livelier spirit, a better acquaintance, more extended professional intercourse, and greater and more concerted action on the part of physicians, we do, therefore, now organize ourselves into a society that shall have for its great object the accomplishment of such ends, and adopt for our government the following constitution and by-laws, viz:

ART. 1st. SEC. 1st. This association shall be known and designated by the name and title of "The Medical Association of Western Pennsylvania and Eastern Ohio."

SEC. 2d. Any regular physician who has pursued a course of medical studies under the tutorship of a physician in good standing, and has attended one or more courses of lectures in a Medical School in good repute, and who, moreover, at the time of his application for membership, shall be actively engaged in the practice of his profession, shall be eligible to membership; (*provided*, that if he has not received a medical diploma from the school he may have attended, he shall, preparatory to being admitted, prepare a thesis on some medical subject, and pass favorably and creditably an examination on the same before the censors or a committee appointed by the President for that purpose,) and all physicians who have received the honorary degree of M. D. from a medical school in good standing, or who may have been in active practice for the last fifteen years, and who recognize and are governed by the principles and standard authorities of the regular profession, and conform to its code of ethics, as put forth by the American Medical Association, shall be eligible, and none others.

SEC. 3d. No irregular practitioner, under whatever name he may be classed, and no regular physician who uses or recommends any quack medicine or patent remedy, or who condescends to resort to finesse or trickery to gain practice, or who pretends to the possession and use of any extraordinary and secret remedies, or who will consult with, or in any manner countenance or encourage any irregular practitioner, shall be eligible to membership, and any member who shall be guilty of such practices, shall be reprimanded or expelled from the association.

On motion, the Association then entered into an election for officers for the ensuing year, which resulted in the choice of Dr. John Baskin, of Mercer, for President. Dr. John Mitcheltree of Mercer county, and

Dr. D. Leasure of Lawrence county, Vice Presidents. Dr. G. W. Baskin of Mercer, Recording Secretary. Dr. Wm. Wood of Lawrence Co., Corresponding Secretary. Drs. J. E. Stewart, R. M. Bebee, of Trumbull county, Ohio, John T. Ray, of Mercer Co., Pa., Walter W. Prentiss, of Mahoning Co., Ohio, Wm. R. Cowden, Butler Co., Pa., and W. G. Henderson, of Mercer Co., Pa., Censors.

Upon taking his seat, the President delivered an eloquent inaugural address, in which he dwelt upon the duties of, and advantages accruing to members of the Association.

Dr. Leasure of Lawrence county, previously appointed for that purpose, delivered an address to the Association, for which the thanks of the Association were tendered, and the address ordered to be published.

Dr. Hart of Clarksville, Pa., from the committee on epidemic diseases of the district, submitted an interesting report.

Dr. Henderson, of Middlesex, Pa., from the committee on obstetrics, submitted a lengthy and interesting report, the reading of which induced

Dr. G. W. Baskin to detail two cases of preternatural labor.

Dr. J. S. Stewart, of Brookfield, gave the history of a case in which a blighted fœtus was expelled at full term, together with a full grown child. Dr. Hart a similar case.

Dr. Irwin, of Sharon, communicated his favorable experience on the use of ext. belladonnæ in rigid os uteri, and it was confirmed by

Dr. Hart, who also advocated the use of chloroform under similar circumstances.

Dr. G. W. Baskin submitted a case of puerperal mania, in which he had successfully used the inhalation of ether to subdue the violence and overcome the restlessness of the patient.

Dr. W. R. Cowden, of Portersville, Butler Co., Pa., offered some interesting remarks on the use of nit. argent. in the cure of paronychia.

Dr. Leasure suggested the use of congelation in the treatment of hæmorrhoids, stating that in his hands it had been perfectly successful.

The following committees were then appointed by the chair, to report at the next meeting of the Association, viz:

On the use of cod liver oil, Drs. Cowden and Leasure. On anæsthetics, Drs. Hart and Rankin. On hæmorrhoids, Drs. Harnet and Dawson. On dysentery, Drs. Ray and Henderson. On eruptive diseases, Drs. Stewart and Bebee. On typhoid fever, Drs. Prentiss and Fowler.

By a provision in the constitution adopted, it also becomes the duty of every member of the Association to send in, or read to the Association, at every meeting, the details of two cases occurring in his own practice.

Drs. G. W. Baskin and Leasure, were appointed a committee of publication.

A committee consisting of one from each county represented in the Association, was appointed to give notice through the papers of the district, (each member in the papers of his own particular county,) of the time and place of the next meeting of the Association. The committee are,

Dr. John McCook, of Columbiana Co., Ohio.
" L. D. Kellogg, Ashtabula " "
" W. M. Prentiss, Mahoning " "

Dr. J. J. Wallace	Lawrence Co.,	Pennsylvania,	
" W. R. Cowden,	Butler	"	"
" A. Sergeant,	Crawford,	"	"
" J. W. Riddle,	Venango	"	"

Paid to the treasurer, by the members of the Association, thirteen dollars.

On motion, the Association then adjourned to meet at Youngstown, Mahoning County, Ohio, on the third Tuesday (the 21st day) of October next, at nine o'clock, A. M., punctually.

G. W. BASKIN, *Rec. Sec'y.*

AMERICAN MEDICAL ASSOCIATION. PRIZE ESSAYS.—At the meeting of the American Medical Association held in Charleston, S. C., in May last, the undersigned were appointed a Committee to receive and examine such voluntary communications, on subjects connected with medical science, as individuals might see fit to make, and to award a prize to any number of them, not exceeding five, if they should be regarded as entitled to such a distinction.

To carry into effect the intentions of the Association, notice is hereby given, that all such communications must be sent, post paid, on or before the first day of April, 1852, to Geo. Hayward, M. D., Boston, Mass. Each communication must be accompanied by a sealed packet, containing the name of the author—which will not be opened unless the accompanying communication be deemed worthy of a prize. The authors of the unsuccessful papers may receive them on application to the Committee, at any time after the first of June, 1852; and the successful ones, it is understood, will be printed in the Transactions of the Association.

GEO. HAYWARD, *Boston.*
J. B. S. JACKSON, "
D. H. STORER, "
JACOB BIGELOW, "
USHER PARSONS, *Providence, R. I.*

Boston, Aug. 20, 1851.

NEW HAMPSHIRE MEDICAL SOCIETY.—The following resolution was presented by Dr. J. S. Fernald, of Barrington, and unanimously adopted, viz :—

"*Resolved*, That it is inconsistent with the spirit of our code of ethics for Fellows of this Society to give certificates of approbation of medical compounds, whether the formulæ be known or not; and that such practice is detrimental to the interests of the faculty, and tends to foster empiricism."

Professors Crosby, Peaslee, and other members present, confessed their faults in this regard, and promised to sin no more.—*N. Y. Med. Gaz.*

NASHVILLE JOURNAL OF MEDICINE AND SURGERY.—We learn with pleasure that this well-stored and spirited Journal will be issued in *monthly* form, from the commencement of the second volume. Dr. BOWLING, the editor, informs us that his effort to establish a medical periodical in the State of Tennessee has been most handsomely responded to by the profession of Tennessee, and the West generally. We wish him continued success.

DR. VALENTINE MOTT, Jr., of N. Y., has been appointed to the Professorship of Surgery in the Washington University of Baltimore.

DR. PAUL F. EVE, of Augusta, Ga., has accepted the chair of Surgical Anatomy and Clinical Surgery in the Medical Department of the University of Nashville, Tennessee.

THE CHAIR OF MEDICINE IN THE FACULTY OF PARIS.—The "Concours" for this chair has lately been concluded by the appointment of Dr. Requin. The candidates were repeatedly balloted for, as they had all given proofs of great capabilities.

HONORARY DISTINCTIONS OFFERED TO M. RICORD.—This indefatigable laborer in his special branch of surgery, has lately received from the Sultan, the order of the Nizam, the cross of which, set with diamonds, is extremely valuable. The king of Spain has likewise wished to acknowledge the merit of M. Ricord, and has sent him the Order of Charles III.

THE STAFF OF THE HOTEL DIEU.—M. Husson, senior Physician to the Hôtel Dieu, has retired from practice, and his retreat has given rise to numerous changes in the hospital staff. Thus, M. Piedagnal goes to the Hôtel Dieu; M. Nonot to La Pitiè; M. Barth to St. Antoine. There is likewise vacant the office of Physician to the Enfans Malades, and to the Female Venereal Hospital, besides the Presidency of the Faculty of Medicine, vacant by the resignation of M. Bérard, who has been quarrelling with his confrères.

DR. WORTHINGTON HOOKER has just received the *Fiske Fund Prize* for an Essay on Homœopathy, which is about being published. This is the second prize which Dr. Hooker has received from the same source, the first one having been awarded for a dissertation entitled the "History of Medical Delusions."

DEATHS OF DISTINGUISHED PHYSICIANS.

HENRY JENNER, M. D., nephew of the celebrated Jenner, died lately at Stone, near Berkeley, Gloucestershire, England, aged 83 years.

DR. MOIR, of Musselburgh, Scotland, died lately at Dumfries in that kingdom, in his fifty-fourth year. He was a skilful and distinguished practitioner, and a contributor of numerous popular poetical pieces to Blackwood's Magazine, under the signature of *Delta*.

M. DAGUERRE, inventor of the Daguerreotype, died near Paris, on the 10th of July.

DR. GILBERT SMITH, of New York, for more than fifty years a highly esteemed and popular practitioner of that city, died in West Chester Co., N. Y., on the 16th of July, aged 80 years.

The venerable SIR GEO. SMITH GIBBES, M. D., died on the 23d of June, at Sidmouth, Eng., aged 80. He was a Fellow of the Royal College of Physicians, and for many years physician extraordinary to Queen Charlotte, during whose reign he was knighted.

M. AMUSSAT ON THE EMPLOYMENT OF WATER IN SURGERY.—This valuable essay, translated by Professor Hamilton, of the University of Buffalo, and originally published in the Buffalo Medical Journal, has, we are glad to see, been issued as a distinct publication.

TRIAL FOR ALLEGED MALPRACTICE.—Prof. T. Spencer, of Milwaukee, was lately tried on a charge of malpractice on a little girl between four and five years of age; the declaration being substantially, that "large doses of calomel," "negligence," "want of skill," &c., had produced necrosis or mortification of the lower jaw. The verdict of the jury in the case was—"No cause of action."

"After the trial, the immediate neighbors and professional friends of Prof. Spencer, gave expression of their feelings of gratification, at a large meeting assembled for the purpose, when the following Preamble and Resolutions were unanimously adopted:

"Inasmuch as we approve of the justness of that law which holds members of our profession accountable for the correctness of their practice, as due not only to the patient who may have been aggrieved, and to the protection of the community at large, but always as the strongest test which society can apply to distinguish between science and quackery, therefore,

"*Resolved*, That as our Legislators have denied us the right to apply a test between science and empiricism, in season to prevent the injuries of the latter in the community, we hail with pleasure the application, in all

proper cases, of the remedy afforded in *common law*, for redress of such injuries, *after they are committed;* but at the same time, cannot too highly censure the conduct of any, who, by false and improper representations, encourage an appeal to this law for redress of fancied injuries.

"*Resolved*, That, with unmingled pleasure, we tender to Professor Spencer, our congratulations on the result of the trial through which he has just passed.

"*Resolved*, That while we congratulate Professor Spencer on his unanimous acquittal from blame, we also deeply sympathize with the family of Mr. Russel, in the grievous and distressing affliction to which they have been subjected, and assure them of our sincere sympathy and condolence."

ENORMOUS CORPULENCE.—Dr. Aran lately published in *L'Union Médicale*, the case of a woman of twenty-five, under the care of M. Rostan, at the Hôtel Dieu, in Paris, who died one month after admission, evidently from a surprising accumulation of fat. Bronchitis and dyspnœa were prominent symptoms. She could not have weighed less than 400 pounds, every portion of her body being disfigured by deposition of adipose matter. On a post-mortem examination, fat was found both in the chest and abdomen; even in the mediastina and between the pleura and the walls of the chest. The viscera of the abdomen were literally lost in the fat, but no organ had undergone fatty degeneration. The patient could not account for the polysarcia with which she was affected, and had lived very moderately.—*London Lancet.*

THE SWEATING SICKNESS.—The sweating sickness continues to prevail with great intensity in the South of France. In a few hours fatal congestion of the brain often ensues. Quinine in large doses has been found to be the best remedy.

THE HUNTERIAN MUSEUM.—In the parliamentary grants of money to medical institutions and charities, voted by the House of Commons, on the 19th July, will be found one of £15,000 towards the erection of an additional museum, and for enlarging the theatre of the Royal College of Surgeons, for the delivery of the Hunterian Lectures. The vote for this munificent sum was agreed to by the House without a division, the Chancellor of the Exchequer stating, that many years ago Mr. John Hunter, the most celebrated surgeon, perhaps, which this country ever produced, accumulated a collection of anatomical specimens of great value, which eventually became so extensive and valuable, that they were bought by the country, and ultimately committed to the care of the College of Surgeons. Since that museum had been committed to their care,

the College of Surgeons has most faithfully discharged the trust reposed in them. They had themselves greatly added to the museum, at a cost of no less than £189,000, and thrown it open to the public. Having spent that very large sum of money, which they were not bound to do, they found themselves without adequate funds to enlarge the museum and theatre, as was their wish. Under these circumstances, they had applied to Government for assistance. The following sums were awarded to medical charities in Ireland:—To the Fever Hospital, Cork-street, Dublin, £3,040; to the Westmoreland Lock Hospital, Dublin, £1750; to Dr. Stevens's Hospital, £1200; the Dublin Lying-in-Hospital, £600; and to the Hospital for Incurables, Dublin, £400,—making a total of £6990 to the medical charities of Dublin. At the same time the sum of £9969 was voted to defray the charges of the General Board of Health, not without great opposition.—*London Lancet.*

Testimonial to Dr. Laycock of York.—A handsome silver tea service has been presented to Dr. Thomas Laycock of York, England, by the Associated Licentiates Extra Urbem of the College of Physicians, with the following inscription:

"Presented to Thomas Laycock, M. D., Physician to the York Dispensary, Lecturer on the Practice of Medicine in the York Medical School, &c. &c., by his friends, the Associated Licentiates Extra Urbem of the Royal College of Physicians of London, in testimony of their very cordial esteem and regard, and in gratitude for the ability, energy and zeal with which he has maintained their rights and interests.—Anno Domini, 1851."—*Dub. Med. Press.*

Poisoning by Nicotine.—An extraordinary trial, which took place in Belgium, and in which the Count and Countess Bocarmé were accused of poisoning the Countess' brother, by the forcible administration of nicotine, has been recently brought to a conclusion. The Count, who was found guilty, was condemned to death, and has since been executed; the lady may consider herself fortunate in having escaped. The most interesting circumstances connected with this horrible affair are, that the Count seems to have prepared the poison with his own hands; and that although he probably selected nicotine as a substance which could not be chemically detected in the body of his victim, M. Stas, a Belgian chemist, obtained distinct evidence of its presence on applying suitable tests. M. Orfila has since communicated the results of some experiments on the detection of nicotine, to the French Academie de Médecine, and although the process which he recommends differs slightly from that which was adopted by M. Stas, he arrives at the same conclusion, viz., that the

poison can be detected unequivocally if present even in the quantity of a few drops in the stomach and bowels, and that it may even be found in the liver and other organs after its absorption into the system.—*London Monthly Journal.*

BELL'S GRAVE.—Perhaps it may not be uninteresting to the admirers of the great Sir Charles to hear of his resting place. On the western bank of the Severn, and about four miles north of Worcester, we come to a rising ground, on which stands a large yellow building, surrounded with trees, and called Kallow Park. In this house Sir Charles died quite suddenly, and on the evening of the day of his arrival; it is supposed that a rupture of some of the heart's cavities caused this great loss to the medical world, but Lady Bell would not allow an autopsy, and thus we are undecided as to the immediate cause of his death.

As we approach the park and ascend the pathway, we see the village church, and in the south-west corner of the yard a few plain tombs are visible, surrounded with iron rails; on one of them the following lines are inscribed:

Sir CHARLES BELL, K. T.
Born at Edinburgh, MDCCLXXV.
Died at Kallow Park, April XXIX., MDCCCXLII.
"Blessed are the pure in heart for they shall see GOD."
This stone is placed by MARTHA, his widow.

Within the church, and almost opposite the entrance, and on the north side of the communion table, is a white marble stone, plain and unadorned, and written on its surface in black letters these words:

"Sacred to the memory of Sir Charles Bell, who, after unfolding with unrivalled sagacity, patience and success, the most wonderful structures of our mortal bodies, esteemed lightly his greatest discoveries except only as they tended to impress himself and others with a deeper sense of the infinite wisdom and ineffable goodness of the Almighty Creator. He died while on a visit of Friendship at Kallow Park."

Dublin Med. Press.

RECORD OF MEDICAL SCIENCE.

ANATOMY AND PHYSIOLOGY.

Lectures on Digestion, Respiration, and Secretion, given at the Royal Institution, to the Members and to the Pupils of St. George's Hospital. By H. Bence Jones, M. D., F. R. S., Physician to St. George's Hospital.

ON THE BILE.

My subject to-day, gentlemen, is the bile, which has, perhaps, given rise to more speculation among physiologists, and more work among chemists, than almost any other which the animal body could furnish. The chemical composition of the bile has formed a subject of inquiry to the very first chemists that have existed, from Berzelius to the present time; but, until very lately, it has not been at all understood. It has also formed the subject of the greatest speculation on the part of the physiologist; and there is scarcely an hypothesis that can be started respecting it which you will not find defended by writers on the physiological properties of the bile. It has been supposed to have the most opposite qualities; and, in fact, there is no limit to the actions which it has been thought capable of effecting. The chemical composition has been most difficult to comprehend, because the bile is a body which can be very easily changed by the different re-agents to which it has been subjected. Even if left to itself, the bile rapidly undergoes change, and new substances are produced from it. Still more rapidly does it change when subjected to chemical re-agents; and hence the opposite statements you meet with in books regarding its composition. It is my object to-day to try and make clear to you, first, the chemical composition of the bile, and, secondly, its physiological properties.

This analysis of the bile shows the kind of substances in it.

Composition of the Bile.

Water, ...	90·44
Picromel (gallenstoff) including fat, . .	8·00
Mucus of the gall-bladder, ...	0·30
Extractive common salt and lactate of soda, .	0·74
Soda, ...	0·41
Phosphate of soda and lime, and traces of a substance insoluble in alcohol, . .	0·11
	100·00

You will see from it, that it contains water, salt, and fatty matter; it contains also gallenstoff, a peculiar stuff, of which I shall have to speak in this lecture. The bile may be considered as a compound resembling the soaps, which are combinations of fatty acids and alkalies. The fatty acids have not the same composition as the peculiar acid of the bile, which is combined with soda; but, nevertheless, the bile more closely resem-

bles a soap than any other substance with which I compare it. The most difficult and most complex substance contained in the bile is that peculiar body, gallenstoff, or gall-stuff. It is this which so rapidly undergoes changes, and so readily gives rise to new products,—products which have received so many names, and created so much confusion regarding the constitution of the bile. You may remember, that in a previous lecture, I spoke of a body called "glycocol," or sugar of gelatine. If gelatine was treated with alkali, sugar of gelatine was produced; and you remember, also, that I pointed out, that if benzoic acid was taken, it passed off as hippuric acid, the latter being nothing more than a compound of the elements of benzoic acid and glycocol.

Relation of Hippuric to Benzoic Acid.

Hippuric acid = Benzoic acid + Glycocol.

$$C_{18}\ H_8\ N\ O_5 + HO = C_{14}\ H_5\ O_2 + O + {}_4\ H_4\ NO_3$$

It is found, moreover, that glycocol can be abstracted from the bile if rightly treated. This is a most interesting and important fact; and it bears, as you will see, directly upon the composition of the gall-stuff, of which I shall have much to say. The composition of this glycocol is given in this diagram.

Composition of Substances in the Bile Stuff.

Glycocol,	C_4	H_4	N	O_3		HO
Taurine,	C_4	H_7	N	O_6	S_2	
Cholalic acid,	C_{48}	H_{39}		O_9		HO
Glycochloric acid,	C_{52}	H_{43}	N	O_{11}		HO
Taurochloric acid,	C_{50}	H_{45}	N	O_{14}	S_2	

Out of the bile, also, can be formed a substance of which you see here, by the kindness of Professor Liebig, a beautiful specimen; it is known by the name of "taurine." It can be obtained without difficulty from the bile; it does not always exist as such in the bile, but can always be obtained from it by re-agents. The most remarkable fact regarding this taurine, is, that it contains much sulphur. You will find that there is another crystalline animal substance, viz., crystine, occasionally found in the urine, which contains the same elements as taurine, only in different proportions. Another substance obtained from bile is called "cholalic acid," of which I have here a specimen in tetrahedral crystals. It is not this acid which combines with soda to form the peculiar constituent of the bile, although it can be obtained from human or ox bile. Cholalic acid has the property of combining with glycocol and forming a compound acid, which may be called "glycocholalic acid." It also forms a compound with taurine, which is called "taurocholalic acid." These two compound acids may be obtained from the bile. The bile is not simply a mixture of taurocholalic acid and glycholalic acid, combined with soda; but these two acids can again combine together to form a still more compound body, which is the peculiar organic constituent of the bile. If this constituent, which has furnished so much work to chemists, be treated in one way, one set of products is formed; and if treated in another

way, another set is produced. Hence so many different matters have been said to exist in the bile.

I have here a beautiful specimen of glycocholalic acid combined with potass and soda, forming the crystallized bile of Platner. And in this specimen you may see the glycocholalic acid free, and I have here separate specimens of glycocholalate of soda and glycocholalate of potash.

If bile is decomposed by a very strong acid, and is then left to stand for some time, or even, it is said, if it is left in the human body, and decomposition takes place, a far more insoluble substance, called choloidynic acid, is produced. This acid can also be formed from cholalic acid by boiling it with strong acid; by heat alone the choloidynic acid is converted into an insoluble neutral substance called dyslysin. This acid is probably one of the substances produced in the human body by the bile, in its passage through the bowels. If this acid is oxidised, among other products, it gives precisely the same volatile products as oleic acid. Here is another resemblance between the substances in the bile, and the fatty substances, of which I have spoken in a previous lecture. Thus much for the composition of this peculiar substance existing in the bile.

I trust I have made it clear to you that there exists in the bile taurine, glycocol, and cholalic acid; that they do not exist as such in the bile, but that they form compound acids, like sulphovinic acid, sulpho-saccharic acid, nitro-benzoic and others; they form highly compound or conjugated acids, which can be broken up by the action of different agents upon the bile. But the peculiar constituent of the bile, as a whole, consists of tauro-cholalic acid and glycocholalic acid, combined together, forming a double conjugate acid, which is united with soda.

A peculiar test for the bile has been given us by Pettenkoffer, which, for its beauty, well deserves to be shown to you. If I take a little ox-bile, freed from all mucus, (which can be done by means of alcohol,) mix it with water, and then add one drop of sugar and a little sulphuric acid, free from sulphurous, I shall have what is known as Pettenkoffer's test for the bile. The strength of the sugar should be one part of sugar to four parts of water. A yellow precipitate is first formed; it then deepens in color, as you see, until it becomes red, and at last a beautiful crimson. The heat produced by the mixture of the acid with the water is generally sufficient for the test. Instead of sugar, acetic acid, and probably other substances may be used.

There is another peculiar substance in the bile which deserves your attention; it is known by the name of cholesterine. It differs somewhat in its re-actions from ordinary fatty matter. I have here a beautiful specimen of this cholesterine in crystals. The substance has this re-action: it is soluble in alcohol by the aid of heat, and when cooled it crystallizes out in beautiful plates. It is a substance containing carbon, hydrogen, and oxygen, and may be represented by the formula $C_{31}\ H_{59}\ O_3$. It is easy to be determined, from its crystalline form and chemical re-actions; fusing most easily, and burning with a smoky flame. Cholesterine forms the usual ingredient of most biliary calculi. It is rarely that the highly complex acids of which I have spoken enter into the composition of

biliary calculi; but the cholesterine, from its insolubility, is much more apt to do so; in fact, but for this substance, gall-stones would be exceedingly rare. Taurocholalic acid dissolves the cholesterine very easily, but glycocholalic acid scarcely at all. Taurocholalic acid is very probably the solvent of the cholesterine in the bile. If in the gall-bladder the taurocholalic acid should undergo any change,—if there should be any loss of its properties, or any conversion of it into another substance, (and it easily undergoes change,) then the proper solvent for the cholesterine is gone, and the cholesterine falls as a precipitate. Very frequently in gall-stones it is found that a small particle of coloring matter forms the centre on which the cholesterine crystallizes. I have here many thousands of biliary calculi removed from one patient; and mixed with the gravel are little particles of dark green biliary matter. Moreover, little particles of coloring matter may be seen to form the nucleus of each little stone, on which the cholesterine has crystallized; sometimes cholesterine calculi attain the enormous size of the magnificent specimen belonging to this institution. Cholesterine is not peculiar to the bile; in this long tube you see crystals of cholesterine removed from a tumor. It exists in the brain, and is formed in atheroma and in chronic abscesses, in tubercles and in pus.

Besides these substances, the bile contains salts; that is, if burned, it gives ashes; and it is found that healthy bile is always of an alkaline reaction, from the quantity of soda present in it. Lastly, the quantity of water contained in the bile is very considerable, but by no means so much as we found in the gastric juice and the saliva; its specific gravity amounting to 1026 or 1030.

Regarding the coloring matter much has been said, but little work has been given to it except by Berzelius, who states that the coloring matter of the bile and the coloring matter of grass are identical; and that this is so, whether the bile comes from vegetable or animal feeders. This coloring matter, perhaps, is a most important accessory, of which we do not know the physiological importance. On the other hand, it may be only a substance derived from the coloring matter of the blood, after it has served the purposes for which it was formed. Time only admits of my stating that, as far as the examination of Berzelius goes, the coloring matter of the bile and that of the grass are both chlorophyl, and are therefore perfectly identical.

I come now to the quantity of the bile formed. This probably varies very much in different animals and in different human beings. Of course experiments cannot be made as to the quantity of bile in human beings; animals alone become subjects for research in this respect. It has been found, that a cat weighing 2¼ lbs. during the most perfect digestion, secreted 11·8 grains of bile in an hour. It appears from experiments in Germany, that the quantity of bile secreted reaches its height about ten or twelve hours after food; that it then diminishes to what it was an hour or two before food. This is a most important fact regarding the physiology of the bile—that it requires as much as ten hours after food has been taken for it to reach its highest quantity:—

Quantity of Bile at different hours after Food.

		Quantity of Bile.
Cat after eating flesh,	2nd hour .	7·5 grs.
"	4th " .	9·7
"	6th " .	11·6
"	8th " .	12·7
"	10th " .	13·0

From the 10th to the 24th hour it diminished at the rate of ·4 of a grain per hour.

By continued starvation the quantity of bile decreases; and in perfect starvation no bile passes out of the gall-bladder at all, though the bladder is always distended with bile. In cases of starvation in human beings, which unfortunately sometimes occur, the gall-bladder is found full of bile, though none can be found in the intestines.

The most remarkable discovery which has lately been made with regard to the bile has been given to us by M. Bernard, a French physiologist, of whom I spoke in a previous lecture, on the pancreatic fluid; the discovery is perfectly original, and deserves the very greatest praise; and it will probably be found one of the most important with which we have lately been made acquainted.

Not only does the bile of those who feed on starch and vegetables contain sugar, but sugar is found also in animals that feed on meat only. During the period of digestion the liver always contains much sugar. M. Bernard has found three times, even in man, that this is the case. I have here an extract from the liver of one of the persons on whom he made his experiments. The sugar cannot be long in the liver without undergoing change,—being converted perhaps, into lactic, or some other acid. Ten or twelve hours after the death of a man or an animal, no sugar would be found in the liver. One liver experimented upon by M. Bernard was obtained from a woman who was executed in Paris for murder. He found that an extract obtained from this liver manifestly contained sugar; and I hope to be able to show you this on a portion of this extract, as he showed it to me.

If I boil this extract in water, I shall dissolve the sugar, if there be any present, and then I shall have a solution to which I can apply my test—that of sulphate of copper and liquor potassæ, by which a reduction will instantaneously take place, such as you have frequently seen. Here is the rapid reduction. M. Bernard finds that in all kinds of animals—mammifers, birds, reptiles, fish, and molluscs—the liver, during digestion, contains sugar. By continuous abstinence, in warm-blooded animals, very much of the sugar disappears. During the period of digestion, the blood which passes out of the liver by the hepatic vein always contains a very considerable quantity of sugar, whatever the nutriment may have been. This is different, perhaps, from what we might have expected at first sight. We might have supposed that the sugar would be absorbed by the veins, and as the blood passed into the liver, we should have much more sugar than as it passed out. M. Bernard found that dogs kept on flesh alone for three, four, five, six, or eight months, gave no sugar in the blood passing into the liver by the vena porta, but in the blood pass-

ing out of the liver, sugar was distinctly present. Lehmann, a German chemist of great authority, has also found, in five different horses, from ten to sixteen times as much sugar in the blood that passed out of the liver, as in that passing into the liver. When the animal was fasting, the blood of the vena porta gave no sugar. The hepatic vein gave it easily and distinctly. Not only did he detect sugar by the reduction of the copper,—which reduction might be said to arise from some other cause,—but he found that it could be fermented, and that carbonic acid and alcohol could be thus obtained. Sugar has also been found in the liver of the fœtus.

M. Bernard says that the function of the liver is twofold; one, the formation of bile, which is thrown out; and the other, the formation of sugar, which is kept in. He has gone still further, and has endeavored to establish the influence of the nerves in the production of sugar. He thinks that the section of the pneumo-gastric nerves near the heart causes the sugar to disappear from the liver altogether; and that by exalting the action of this nerve, and especially by irritating it at its origin in the brain, the quantity of sugar thrown out can be greatly increased. I shall have occasion to return to this fact in my lecture on diabetes. However this may be, there can be no doubt that by the change which the blood undergoes in the liver, sugar is actually produced. The facts are these. Much fatty matter is found going into the liver by the portal vein with but little sugar; and from the hepatic vein there comes out much sugar, with but little fat. The explanation of this has not yet been fully ascertained. A conjecture has been given by one who always abounds in valuable conjectures—M. Schmidt, a German physiologist. I may show you this possible conversion of fat into sugar, thus:

Relation of Fat to Bile.

Fat acid + 14 oxygen = cholalic acid + 8 water

$C_{48}\ H_{47}\ O_3 + 14\ O = C_{48}\ H_{39}\ O_9 + 8\ HO$

2 eq. glycerine + 4 oxygen = sugar + 2 water

$C_{12}\ H_{14}\ O_{10} + 4\ O = C_{12}\ H_{12}\ O_{12} + 2\ HO$

Suppose that going into the liver we have fat, consisting of fatty acid and glycerine, and that coming out of the liver, we have bile and sugar; then supposing the process of oxidation to take place—that is, that the fatty matter obtains oxygen—we have fatty acid and 14 eq. of oxygen, which give the elements of cholalic acid and water; whilst from glycerine with oxygen we have the elements of sugar and water. Thus, if we suppose that in the bile a process of oxidation is taking place, we have an explanation of the fat going in and the sugar coming out. I give this simply as a conjecture, I do not say that it is so; for no such change has been effected out of the human body by acting on fat. It is, at any rate, an explanation which enables us to remember the fact, that fatty acid and glycerine go into the liver, and that coming out of it, we have bile acid, and sugar. The bile acid is thrown out, and is used for purposes of which I shall have to speak; and the sugar passes in, continues in the circulation and is used for further purposes in the animal economy.

What, then, is the physiological action of the bile? The most opposite and the most important actions have been attributed to it. It has been said to promote digestion, and to stop digestion. Some say that it neutralises free acid, thus lessening irritation; others, that it increases the peristaltic action of the bowels, thus increasing irritation. It has been said to be partly absorbed into the system to support respiration, by furnishing a highly carbonaceous body. Some have said that it promotes the absorption of fatty substances; and by others, it has been said to have no action upon fats at all. To solve these questions was the difficulty. Experiments were tried by tying the common duct through which the bile passed; but this is not the way to arrive at a satisfactory result. If the bile is not suffered to pass, a stoppage is put to the functions of the liver; the whole order of the system is thrown out, and general disorder is produced. In 1844 a new mode of experimenting was begun by Schwann, who collected the bile without allowing it to pass into the intestines, by means of an opening similar to that which I mentioned in the case of the pancreatic duct. The action of the liver thus went on as usual, and all the functions of the body were performed without impediment. Twelve dogs lived from sixty-four to eighty days without any bile passing into the intestines; one dog, thus experimented upon, lived four months; and another, belonging, I believe, to M. Bernard, lived a year in this state. It was found that dogs thus treated ate much, and digested badly, partly in consequence of the unnatural fistulous opening. They did not lose much weight at first; but after a little time they lost their appetite, became thin, and ultimately died. The bowels acted as regularly and perfectly as if the bile had passed in the usual manner. Professor Nasse had a dog that lived from the 12th of August to the 27th of January. The quantity of bile varied with different kinds of food between 31 grains and 370 grains daily, with from 16·44 to 19·19 per cent. of solid constituents. Less was secreted when the dog was ill. The dog ate much; digested badly; did not lose weight at first; afterwards lost its appetite, and then became thin. M. Blondlot had a dog that flourished for three months. The bowels acted twice daily.*

Even in human subjects, it has been found that when a fistulous opening has been made, owing to perfect obstruction of the common duct, by inflammatory action, the bowels have continued to act when the bile did not pass,—showing that the bile is by no means indispensable for their action.

Many experiments were tried with dogs, as to the quantity of bile secreted. The influence of medicine was also tried; and it is interesting to us to know that the action of mercury was decidedly to increase the quantity of bile secreted, as has long been held by medical men. If animals can live for a year, enjoy tolerable health, and digest their food,

*At the meeting of the French Academy, on the 23rd of June this year M. Blondlot gave the history and *post-mortem* of a dog that lived for five years without bile passing into the intestines.

without any bile passing into the intestines, the importance of bile and its necessity for the purposes of digestion have been exaggerated.

The action of bile out of the body on the different constituents of food, tends to precisely the same results as we have seen obtained by experiments in the body. Bile, when mixed with neutral fat or with oil, is found to have no chemical action whatever. It makes a sort of emulsion only, not quite so good as that produced by the pancreatic fluid. I added to solutions both of pancreatic juice and bile, equal quantities of water and oil, and then left them, after agitation for some time, to see which produced the most enduring emulsion. You see them here; both have caused the fatty matter to be minutely divided: but I think the pancreatic fluid has divided it and kept it divided the best. When fresh out of the body bile has no action on starch; it does not change it into sugar, as we saw the saliva did. When, however, it is allowed to decompose, it has a slight action upon starch; but not more than all animal substances have. It has no action on cane-sugar until after it has stood for a considerable length of time, and then the cane-sugar is converted into acid. With grape-sugar, if left for any length of time, it forms lactic acid; but so do all other animal substances when in contact with sugar. It has no action, even when acidulated on casein, or on the albuminous substances which constitute our food.

It has been said that the liver purifies the blood by removing a large quantity of carbonaceous substance from it. To determine this by absolute experiment was a matter of great difficulty; but Schmidt has endeavored to solve this question by experiment on forty cats, thirteen geese, many sheep and rabbits, in which he made fistulous openings into the gall-ducts for the purpose of collecting all the bile, and of determining the proportion between the quantity of carbonic acid thrown out by the lungs and the quantity of carbon in the bile. He passed a tube into the gall-duct, and could measure how much gall came out per hour; and he could determine the composition of the bile by burning it and collecting the carbonic acid. He made, at the same time, comparative experiments on the respiration, some of which I shall have to detail to you in a future lecture; and he came to the conclusion that not more than from one-tenth to one-fortieth of the carbon which passes out of the body passes by the liver, and that therefore the liver has no considerable action in freeing the blood from carbonic acid or carbon. He found that eight-ninths or nine-tenths of the carbonaceous matter remains in the circulation, and does not pass out by the bile at all, but is thrown out through the lungs; a small portion, however, must escape in the urine, probably not much less than passes out in the bile. But I am unable to give you the proportion of carbon in the urine and bile daily excreted, from want of experiments.

What, then, in conclusion, are the uses of the bile? I have shown you that it is an alkaline fluid, and a body resembling soap. If soap is brought into contact with an acid, you know what happens: the alkali of the soap and the acid combine, and the acid of the soap is set free and precipitated. So, also, is it in the bile. If I take human bile, and

mix it with acid, (as you see in the experiment, with sulphuric acid,) a greenish white precipitate is formed. Let me show you what would happen to human bile, if mixed with the acid secretion of the stomach. This I can do by adding dilute hydrochloric acid to a portion of bile, or better still, by mixing some of the clear fluid obtained from the contents of the stomach, which I showed you in my lecture on the gastric juice; by both a precipitate will be immediately produced. (Experiment.) The alkali which exists in the bile goes to the acid; it neutralizes so far, the acid reaction coming from the stomach; and it precipitates the insoluble acids, which give rise to choloidynic acid, and even to that still more insoluble substance, Dyslysin, in its passage through the intestinal canal. It appears to me, then, that one great action of the bile is to furnish an alkaline fluid, which, when mixed with the acid secretion that has served the purpose of dissolving the albumen, will neutralize it, and lessen its acidity, so as to prevent it from producing irritation and increased action of the intestinal canal. That the stomach can actually bear much stronger acid than the bowels, is known to most medical men. That the acid does not pass rapidly out of the stomach I am convinced by the following experiment. To an adult man I gave 162 grains of dry, pure tartaric acid dissolved in two ounces of water. No pain was felt for three hours; no food was taken during this time; and without doubt, all the tartaric acid would in these three hours have been absorbed, or would have passed out of the stomach. At the end of this time, a pain in the bowels began to be felt, and at the end of the fourth hour there was very considerable pain, coming on in paroxysms. At the lapse of about five hours, if the bowels had been allowed to act, they would have acted from the acid thus taken. A repetition of the experiment, with 84 grains, gave precisely the same results. When the acid entered the bowels, pain began to be felt, and, if bile in plenty had been poured out, the acid would have been neutralized, in part at least; the alkali would have combined with the acid; the insoluble bile acid would have been formed as a precipitate, and been thrown out of the body. If this be so, sluggishness of the liver, a deficiency of alkali poured into the duodenum, becomes a reasonable cause of excessive acidity of the intestines; the gastric acid required to dissolve the albuminous food, if sufficient bile is not formed, will pass into the intestines, and produce irritation and increased action. The physician has long held, that want of action of the liver gives rise to acidity, and that alterative medicines correct this state.

But the very great size which the liver attains in the fœtus appears to indicate that it performs some additional action independent of food and of digestion. This additional action has been said, by German physiologists, to be the reparation and the formation of blood globules; but this is by no means proved. It seems to me much more probable that it is for the purpose of neutralizing the acid, and probably also, for the purpose of removing, when requisite, some of the carbonaceous substances; in certain states compensating for the action of the lungs, though, in ordinary states, removing much less carbon than has been said. The bile

gives water, moreover, to dilute the chyle; it tends to the subdivision, in some degree, of the fat and the oil of our food. It acts upon the free acid of the intestine; and some of it may be possibly absorbed, and pass into circulation again, as Professor Liebig originally conjectured. It is not nearly so important as the gastric juice, which dissolves the albuminous part of our food, or the pancreatic fluid, and the salivary fluid, which convert all the insoluble starch, as I have shown you, into soluble sugar. Lastly, the importance of the bile in forming sugar from fat, is one of those facts which cannot be overrated. By this discovery of M. Bernard's, very important knowledge relating to the physiology and pathology of man will be obtained during the next few years; at least there can be little doubt, that the disease known as diabetes, if not closely connected with this production of sugar in the liver, must at least be influenced by it to a very considerable extent.—*London Medical Times.*

The influence of the hours of the day on mortality.—The observations and calculations of Dr. Casper lead to the conclusion that the maximum of deaths occurs in the fore part of the day, and the minimum between evening and midnight. The explanation of this, Dr. Casper seeks in the analogy between sleep and death: sleep, being the period in which great organic changes occur, is *pro tanto*, favorable to the dissolution of the individual.

The diseases which are the causes of death exert a modifying influence on the hour at which death occurs. The origin and progress of diseases, their exacerbations, and remissions, are frequently observed to occur at certain times of the day. The influence of these on the hours of death is shown by the following table of 5591 deaths from various diseases.

	From midnight to 6 A. M.	From 6 A. M. to noon.	From noon. to 6 P. M.	From 6 P. M. to midnight.
ACUTE DISEASES.				
Fevers	64	75	66	66
Inflammations	160	164	182	160
Exanthemata	44	45	43	59
CHRONIC DISEASES.				
Phthisis	186	240	215	186
Atrophy	847	381	282	255
Hæmorrhages	163	186	161	121
Chronic Catarrh	41	47	34	24
Dropsies	90	119	93	64
Neuroses	267	267	191	179
Other chronic Diseases	76	102	89	85
Totals { Acute	268	284	291	285
Totals { Chronic	1140	1344	1065	914

The next table exhibits the variations from the general rule, in the same class of diseases, on the side either of excess or deficiency, as indicated by the signs + or —.

	From midnight to 6 A. M.	From 6 A. M. to noon.	From noon to 6 P. M.	From 6 P. M. to midnight.
ACUTE DISEASES				
Fevers	—16	—15	+ 1	+30
Inflammations	—12	—45	+31	+26
Exanthemata	—22	—55	—18	+95
CHRONIC DISEASES				
Consumption	—27	— 1	+17	+11
Atrophy	+ 5	+18	—15	— 8
Hæmorrhages	+ 6	+ 4	+12	—22
Chronic Catarrh	+29	+31	—10	—50
Dropsies	— 6	+17	+11	—33
Neuroses	+43	+ 6	—32	—17
Other Chronic Diseases	—36	— 1	+10	+27

The following are briefly the conclusions of Dr. Casper on the influences investigated by him :—

1. *As to births.*—More births occur from nine o'clock in the evening to six o'clock in the morning than during other hours of the twenty-four. Labor-pains commence more frequently between midnight and three o'clock in the morning than at other times. Of those births which terminated during the day, the majority were male children. Labor is longer if the pains begin in the day-time than if it commence during the night. This influence is more striking with still-born than with living children.

2. *As to deaths.*—The maximum general mortality occurs during the earlier hours of the day, the mininum in the evening. Of special causes of death the relative mortality with reference to the time of day presents many variations. Inflammatory diseases present their maximum in the after-part of the day; fevers and exanthemata in the earlier hours of the night; hæmorrhages in the fore part of the day and in the afternoon; and the neuroses generally in the hours after midnight.—*London Med. Gaz. April* 1851.

OBSTETRICS.

Case of Transfusion of Blood.—The following case of successful *Transfusion* is reported by Dr. Marmonier, in the *Gazette Médicale de Paris*, 5th July, 1851, and is copied into the *London Medical Times* 9th August, 1851, from which we extract it. It is particularly interesting from the simplicity and ease with which the operation was performed.

"Jan. 3, 1851.—At six o'clock in the morning I was called to a woman named Mallet, of Lancey, aged 30 years, of a lymphatic constitution, somewhat weakened by many pregnancies occurring in quick succession, by previous difficult labors, and by moral and physical trials. The labor pains on my arrival had nearly ceased. The patient was weak and exhausted from long-continued and useless efforts, which were un-

able to cause the expulsion of the child, on account of a very decided anteversion of the uterus. I performed the operation of turning and extracted the child by the feet; unusual hæmorrhage supervened, which forced me to extract the placenta rapidly, and to excite the contraction of the uterus, which was in a state of collapse. This plan succeeded, the discharge being arrested in a few moments.

"In three-quarters of an hour I withdrew, leaving her to the care of the midwife; but in half an hour after my departure, the discharge reappeared in great abundance; this was stopped by syncope. The hæmorrhage again returned; and, on this occasion, left the patient in a long-continued state of very great exhaustion and syncope.

"I was again called, and returned at the moment of the first discharge. The attendants believed her dead, and indeed she was in a state of hopeless exhaustion; she had extreme pallor, with cold extremities, pulse almost, and sometimes altogether, imperceptible, obscurity of vision, and repeated syncope. I had recourse to astringent and refrigerant applications—a concentrated infusion of ergot of rye—a cordial potion, dry frictions over the skin with a brush and with flannel, at the same time applying hot cloths to the limbs. I persevered in this manner for three quarters of an hour, without obtaining the least melioration, the state of the patient, on the contrary, gradually becoming worse, and I foresaw the inevitable approach of a fatal termination. At this moment the recollection of a case by M. Nelaton decided me to attempt the transfusion of blood, although alone, and without any of the usual instruments for the performance of this delicate operation.

"I found in the house a small child's syringe, which would hold about 70 grammes of blood, having ordered in readiness hot water, vessels, and linen; a neighbor of the patient, a girl named Faget, was kind enough to consent to allow the necessary quantity of blood to be taken from her arm. Everything being arranged, I made an incision three centim. in length over the basilic vein in the right arm of the patient, in the direction of its course. I then completely isolated the vein for the extent of two centim., and passed below it a ligature to enable me to raise the vein, and to tie it upon the point of the syringe. I then divided the coats of the vein for a demicentimetre in length: two or three drops of blood only escaped. I then compressed the vessel above and below. Having bled Faget, and the blood being received in a cup, placed in a vessel full of water sufficiently hot to preserve it at its ordinary temperature, I quickly took the syringe, previously warmed, and filled it completely with the blood, forcing forward the piston so as to be quite certain that it did not contain any air, the tube of the syringe being inserted into the opening in the vein, and, having tied the ligature lightly around its point, I slowly and with care injected the blood into the vein; after having forced the piston through one-third of its course, I felt a sudden resistance, which showed me that the blood no longer penetrated the vein either from coagulation having taken place, or from some other cause; I of course, immediately ceased to press forward the piston.

"In recommencing the operation I enveloped the syringe with linen thoroughly moistened with hot water, and this time nearly all the blood

which the syringe contained was injected into the vein. The whole quantity of blood introduced by the two attempts might be calculated to be about ninety grammes, without any subsequent pain or inconvenience.

"Immediately after the transfusion, respiration became more regular, the pulse stronger, the tendency to syncope suddenly ceased, and the obscurity of vision, which had been a permanent symptom, rapidly subsided.

"To keep up this improvement, after having dressed the little wound, I recommenced the use of frictions and hot cloths, besides again having recourse to rhatany and ergot of rye.

The circulation and animal heat returned by degrees, and two hours after the operation, the patient was so well that she slept for a short period, and to this sleep succeeded an unexpected melioration, which put an end to this alarming crisis.

"From this time her convalescence was rapid; the secretion of milk took place regularly. Ten days after, the patient was able to rise for an hour in the day; on the twentieth day she was completely well, and at the end of thirty days she was able to follow her usual occupations."

PATHOLOGY AND PRACTICE OF MEDICINE.

Treatment of Skin Diseases, Small-pox, Syphilis, and Ague in Morocco.—We extract from an interesting paper of Dr. Dulac, a French surgeon employed in the embassy to Morocco, the following particulars. The most frequent diseases in Morocco are tænia, the itch, small-pox, syphilis and ague. The *favus vulgaris* is much more common than the *scutiformis*, and the *theubibs* (or doctors) employ the following remedy against it:—A water tortoise is thrown into a large fire, and is there left until it is completely carbonized; it is then taken out and pounded in a mortar. The powder mixed with oil, is every evening smeared on the patient's head, who washes off the ointment in the morning with sea-water. A great many cures are said to be thus obtained. Almost all the Arabs use for the itch an application of sulphur and butter, with which they rub the whole body; in the mountains, however, they prefer a purgative composed of pitch and very rancid butter. In obstinate cases they use an ointment composed of one drachm of arsenious acid to two ounces of butter. Three days' frictions all over the body are said to be sufficient for a cure. Small-pox destroys a frightful number of people, especially in the spring, and as much as one-fourth, or even one-third of the inhabitants of certain localities are carried off. The Moroccese obstinately refuse to be vaccinated, and say that the law of the Prophet is against the practice. The Jews are less averse to vaccination, and Dr. Dulac succeeded in vaccinating several children belonging to Jewish parents, but not one Musselman child was ever brought to him. The *theubibs* say that the small-pox lasts just nine days, and they divide these into three periods. They state that the pustules form during the first three days, that they fill for the three next, that they empty themselves and dry up for the three last, and that the patient is out of

danger on the tenth day. He is prevented from taking any fish, or herbs, and is given weak tea and chicken broth; the variations of temperature are avoided, and lemons or vinegar are carefully excluded from the patient's room. Castor-oil, or very rancid butter, is afterwards used as a purgative; the latter being sometimes mixed with a little tar.

Syphilitic affections are very common in Morocco; syphilis is called *merd el kebir* (the big disease.) Dr. Dulac saw principally secondary and tertiary affections, which chiefly occupied the anal region. The *theubibs* treat syphilis either with or without mercury. When the metal is not used, the *Haskba* (sarsaparilla) is given, of which the patient is made to *eat* one ounce per diem. He is desired to swallow the whole root, as the doctors do not believe that water can take up its medical properties. The patient avoids tea and coffee, and takes only bread and dried fruit. He continues this for forty days, is then smartly purged, and allowed to resume his usual mode of life. When this treatment does not succeed, and ulceration of the penis or a discharge from the urethra persists, mercury, extinguished in honey, is given. No other mercurial preparation is known. Five grains are given once a week, and a strong dose of castor-oil is administered soon afterwards.

Ague is very common, and though the *theubibs* know the properties of bark, they and the patients avoid its use, owing to its high price; they substitute for it ground coffee mixed with lemon-juice, and likewise various kinds of bitters. A very celebrated *marabout* in the neighbourhood of the city of Morocco, possesses an infallible specific for ague, but it requires more than common courage to take it. It consists of a slice of bread and butter on which is placed a layer of *pediculi capitis*. Dr. Dulac mentions that this remedy was *proposed* to the wife of a European consul at Tangiers, who could not get rid of her ague, but he does not say whether she *took* it. Dr. Dulac spoke, on the other hand, to several Arabs who had done so, and who spoke very highly of the efficacy of a specific so cheap and so easily procured. When a *theubib* has exhausted all his remedies without any beneficial results, he resorts to religious practices; he, for instance, writes a few verses of the Koran on a slip of paper, burns it, and makes the patient swallow the residue. Or he writes on a dinner plate what he had put on the paper, washes off the writing from the plate, and desires the sick man to drink the water used for the purpose. Or he, lastly, proceeds like the *mesmerisers* of this country, makes several passes over the head of the patient, and mutters some prayers. As a *dernier resort* the patient undertakes a pilgrimage to some holy and celebrated *marabout*, where he offers up in sacrifice, either a bull, a sheep, a goat, or only a hen, according to his means.—*London Lancet.*

A Statistical Report upon Disease of the Heart, derived from a consideration of all the cases admitted into St. George's Hospital during the last two years and a half. By Dr. Barclay.—Rheumatism is first considered as one of its causes. Divided into two nearly equal classes —those really inflammatory or acute, and those less so, or sub-acute, —the former class is found to contain sixty-seven cases with cardiac

lesion, sixty-four without, and twenty-one doubtful. Endocardial murmur is found not to be certain evidence of disease, even in the most acute cases. Females are slightly more liable to acute rheumatism than males, but less liable to a recurrence of the disease. Females are more decidedly liable in a larger proportion to cardiac complication, and this is especially proved by the existence of friction-sound in the proportion of three females to two males. Cardiac complication exists eighteen or twenty per cent. more frequently in subsequent attacks than in primary ones. It is in the proportion of three to two of all the cases up to the age of twenty-five, and falls very rapidly after that age. The cases of sub-acute and chronic rheumatism furnish no examples of recent inflammation of the heart, but a considerable number of cases of old disease. So far as could be ascertained, these were almost all traceable to previous acute attacks, and were only about one-third of the cases which had previously suffered from acute rheumatism. The post-mortem appearances of recent inflammation are found associated with acute rheumatism, with disease of the kidney, with inflammation of the peritoneum and pleura, and with old disease of the heart, especially when hypertrophy existed, and with turbulent action during life. The cases of old disease of the heart are divided into sixty-one rheumatic, seventy non-rheumatic, and sixty-nine doubtful. They show a very considerable preponderance of males, especially among fatal cases. Up to the age of twenty, almost the whole, and even as far as thirty, more than half the cases, are associated with acute rheumatism. In the next twenty years, the non-rheumatic almost double the rheumatic cases, and after fifty, there are scarcely any derivable from rheumatism at all. The duration of rheumatic cases, dating from the first attack of acute rheumatism to death, is generally much longer for females than for males, varying in the latter from four to six years; in the former, from twelve to sixteen years. Four out of seven fatal cases of acute rheumatism, and twelve out of eighteen of older standing, are associated with pericarditis, which is always severe and extensive; but universal adhesion is neither the constant nor even the common result of rheumatic pericarditis, and it exists in cases where the previous existence of rheumatism is altogether denied. In valvular disease there are eighteen rheumatic cases, twenty-three non-rheumatic, and twelve doubtful The recent cases are all examples of inflammation of the mitral. When old and recent disease exist together, and when old disease is seen in different stages, the mitral valve generally appears to have been first attacked, and the aortic secondarily; and hence the preponderance of double valvular lesion in rheumatic cases, seems to be due to renewed inflammation at distinct periods. Inflammatory thickening occurs also in several cases in which there had been no rheumatism. Disease of the kidney is associated with two cases of simple recent fibrinous deposit on the valves, and three of recent pericarditis, in which no other cause was known to have been in operation. It seems questionable how far this can be taken as a cause of great thickening of the valves, or of an adherent pericardium. Disease of each set of valves seems to produce, in nearly

equal proportions, hypertrophy and dilatation; but aortic regurgitation especially the latter, atheroma of the aorta, more commonly hypertrophy; adhesion of the pericardium, chiefly dilatation. Disease of the kidney is associated with an immense majority of the cases of hypertrophy, and similarly of the cases of disease of the kidney; more than a third presented on post-mortem examination more or less of hypertrophy of the heart. *Dublin Medical Press.*

SURGERY.

An examination of a distorted knee. By JAMES ROBERTSON, M. D., F.R.C.S., M.B., Lond., Physician to the Infirmary, Hitchin.—I am induced to record the examination of the distorted knee of a person who lately died under my care (from ulceration of the intestines) because I find no such examination recorded; and from the growing importance of the surgical treatment of deformities, every item of pathological knowledge is desirable, and because it presented some interesting appearances, the knowledge of which may be useful when writing "On Deformities." Mr. Tamplin (and I know of no more experienced writer on the subject) says, (Lectures, pp. 120, 121, on Deformities of the Knee-joint,) "When the deformity is considerable, and has been so for some years, does the articulating surface itself alter in position; or does the internal condyle itself alter or increase in size, or project more than it does in its natural size? I do not believe that either of the changes takes place. I believe no alteration takes place; certainly none by attrition. Yet it is a question on which, from our present experience, I am unable to speak positively."

That these very alterations do *sometimes* take place, the following case proves.

R. P., aged 32, had his right knee distorted for many years; he attributed it to carrying water when young; it presented the usual appearance of genu valgum or knock-knee, of severe grade, the leg and thigh forming a considerable angle, which admitted of being slightly lessened by manipulation; his left leg was straight. After death the angle did not admit of alteration. The tendon of the biceps and the external portion of the fascia lata were tense, but division of these did not allow of any material alteration of the position of the leg. The internal lateral ligament was lengthened. On opening the joint, the interior, except the articular surface and the crucial ligaments, presented a dark purple color, from a layer of enlarged tortuous vessels gorged with blood, ramifying under the synovial membrane, which was disposed in an infinite number of folds hanging into the joint, in form after the fashion of the valvulæ conniventes, in consistence like loaded plexus choroides, showing, when magnified, innumerable compound—or looped—loops of vessels enveloped by synovial membrane. The joint contained from half to three quarters of an ounce of thick, glutinous, yellow transparent fluid. The articulating surfaces and crucial ligaments were of their natural color; a patch on the middle of the patella, as large as a six-

pence, was partially denuded of cartilage, and had a puckered appearance. There was a similar but smaller spot on the edge of the articulating surface of each of the condyles in front; these places suggested the idea of old puckered cicatrices. The end of the external condyle, and corresponding portion of the articulating surface of the external tuberosity of the tibia were denuded of cartilage, and the cancellated substance of the bone was bared to an extent equal in size to a fourpenny piece; around these rough surfaces, for about the sixth of an inch, the cartilage was was detached and lay in a thin fringe on the bones. The cartilage became thicker as it receded from these fringes, and on the extremity of the inner condyle was scarcely less than a quarter of an inch thick.

On microscopic examination, these fringes consisted of little else than rows of cartilage cells. Whilst as the cartilage became thicker, the intercellular substance increased and the cells diminished in quantity, till at the thickest part these were thinly scattered. There was no appearance of vessels in the cartilage. The articulating surface of the inner condyle was considerably longer than natural, and more pointed; the outer, shorter and flatter. The semi-lunar cartilages were mere rings round the outside of the articular surface of the tibia; the crucial ligaments were perhaps rather long. The other parts of the joint presented nothing unusual. Thus, in this case, the internal condyle did project, was increased in size, the position of the articulating surfaces altered, and marked changes by attrition were evident, etc., etc., though not expected in such a case by the experienced writer above quoted. I need scarcely add, that joints similar to this would not promise a very successful result to operative or other efforts, to cure the deformity, and that I record this, not as offering the general condition of the parts in the same disease, but as showing what is sometimes their unpromising condition.—*Medical Times.*

On a case of Fistula of the Urethra. By JOHN PATTESON, Esq., M. D.—M. I——, aged twenty-four, consulted me on Jan. 3, 1851, complaining of a muco-purulent discharge from the urethra. He had contracted gonorrhœa nine months previously, and the discharge since then has been constant. On examining the urethra with a bougie, I found a stricture in the membranous portion, and a sac or tumor in the portion about an inch below the corona glandis. This sac or tumor, when he made water, became always more or less distended, and by pressure could be nearly emptied; a sanious muco-purulent discharge appearing at the urethral orifice.

I punctured the cyst, and threw an injection of tincture of iodine diluted with water into it daily, at the same time treating the stricture in the usual manner. To the patient, who was of the scrofulous diathesis, I gave full doses of the iodide of potassium, and the fluid extract of sarsaparilla. This treatment along with bandaging, was persevered in for some time, without any benefit to the urethral fistula. On Feb. 22, I operated for the cure of his fistulous opening in the following manner, being assisted by my pupil, Mr. Constantine M'Guire:

Having first introduced a full-sized silver sound into the urethra, I then, with a narrow sharp-pointed knife, laid open the sac, and then found three fistulous canals proceeding from the cyst, in a direction downwards towards the perinæum, to the extent of three-quarters of an inch, when all three united, becoming one canal, which took a direction immediately backwards, and opened into the urethra, by a single opening rather more than one line in diameter. The next step was carefully to excise my puncture of the sac, and the callous sides of the fistulous canals; I then, with a small cautery-iron, touched the opening in the urethra. For the first few days the cold-water dressing was used, and the bladder regularly emptied with the catheter. The after-dressing was the basilicon ointment, and now and then with a solution of nitrate of silver.

In the course of ten days all discharge from the urethra had ceased; the patient progressed favorably, and on March 16th he was discharged cured.—*London Lancet.*

On the use of the Blind Gut of Fowls as a plug in Epistaxis.—Dr. R. Hamilton, of Morristown, Belmont Co., Ohio, recommends this plug as peculiarly adapted to the treatment of Epistaxis. The following is the mode of application:

"Having freed the gut of all offensive matter, slip the cut end of it over a small quill, secure the attachment of the quill and gut by a few turns of pack-thread round the gut where it embraces the quill: pass a probe or knitting-needle through the barrel of the quill to the shut end of the gut; clear the nostril and throat of all clots, pass the gut on the probe along the floor of the nostril until it passes a little into the pharynx, taking especial care to have the concave side of the gut upward; withdraw the probe leaving the gut in the nostril. With the mouth applied to the quill blow forcibly into the gut, distending it as much as possible; tie the loose end of the gut securely between the quill and the nose, cut off the end of the gut containing the quill; and the operation is done. If medicated fluids or ice water are preferred, charge a syringe with them, introduce the point of the syringe into the quill, force its contents into the gut, and tie as above.

Another advantage the gut enjoys above every other plug is, that as soon as the coagulum has hardened so as to secure the safety of the patient, it may be punctured, and its contents allowed to escape, relieving the nostril of an annoying sense of fulness occasioned by necessary stretching of the parts. This may be done, long before the secretion of mucus from the Schneiderian membrane will have so loosened the clotted blood around the plug that it may be removed with safety; from three to four days being required to complete that process."—*Trans. of Belmont Medical Society, for* 1847.

Dislocation of the Humerus on the Dorsum of the Scapula; Reduction. (Under the care of Mr. Stanley.)—The nomenclature of the various dislocations of the shoulder has given rise (at least among surgeons) to frequent discussions, which, as is too often the case, have not ended

in a perfect understanding upon the subject; and the English reader, after taking cognizance of the divisions partially adopted in France and Germany, gladly returns to the denominations, *downwards*, *forwards*, and *backwards*, taught in our schools. The luxation which we have now to consider, and which happened in a patient of Mr. Stanley's, is called by some French surgeons the sub-variety of the sub-acromial, and by others, sub-spinal; the Germans, as stated by Mr. Smith in "Chelius' Surgery," call it outwards; but most surgeons will agree with us, that backwards, or on the dorsum scapulæ, is as correct a name as can be desired. That this displacement occurs but very seldom is a well known fact; it had not been seen for a long period at St. Bartholomew's Hospital; and Sir Astley Cooper says, in his work on Dislocations and Fractures: "Two cases only of this accident occurred in Guy's Hospital in thirty-eight years, the first during my apprenticeship. The nature of the accident was at once obvious from the projection of the head of the bone on the dorsum scapula. The bandages were applied in the same manner as if the head of the humerus had been in the axilla, and the extension was made in the same direction as in that accident." The reduction was easily effected; the second case presented itself several years afterwards, and was reduced by the dressers. Sir A. Cooper mentions seven more cases, which mostly occurred in private practice.

That the reduction took place so readily, by using the same means as for dislocation into the axilla, might create surprise, for it seems at first sight natural that extension should be made a little outwards, when the head of the bone is lodged on the dorsum of the scapula. But the dislocations of the shoulder-joint are generally fraught with so little danger, the reduction is commonly so easily obtained by proper extension and coaptation, that it would be, perhaps, unwise to establish very nice distinctions as to the precise direction in which extension is to be made.

Mr. Stanley's patient was a farm laborer, aged sixty-two years, a strong, healthy-looking man, who was admitted into St. Bartholomew's Hospital, on the 4th of April, 1851, suffering from a dislocation of the shoulder-joint. The patient states that he was driving in a cart, in the company of a fellow-laborer when the horse fell, and both of the men were thrown or jerked out of the cart. One of them escaped unhurt, but the patient was violently thrown on his right shoulder, the whole weight of the fall being borne by that articulation. The contusion and laceration were not considerable, as he luckily fell on a plot of grass; but it would appear that the lesion was of a serious character, as some of the actions of the joint were suddenly lost.

The patient applied at once to a surgeon, who told him that the limb was dislocated, and attempted reduction, by putting his heel into the patient's axilla, whilst the latter was lying on his back. The efforts were, however, fruitless, and the man was advised to repair to this hospital. On examination, it was found that the axis of the right humerus, in its relation to the body, was very much altered. Beneath the spine of the scapula, and towards its outer side, was a firm hard swelling: this was the head of the bone, the fact being proved negatively by its absence

in the proper position, and positively by the swelling moving when the arm was being rotated. The glenoid cavity can be felt empty; there is very little motion of the arm, and the deltoid is tense. On rotating the arm, a kind of crepitus is distinguished, which does not feel like the ordinary crepitus of fracture, but is probably occasioned by the rubbing of the head of the bone against the axillary border of the scapula.

Mr. Stanley having determined to proceed at once to the reduction of the limb, the man was placed in a chair, and his body fixed; extension was first made in a direction outwards and rather downwards, the limb being grasped above the elbow. Scarcely had the extension begun to be used, before the bone was felt to slip from the scapula into the *axilla*. Further extension was made for about ten minutes, with no further effect. A jack-towel was now placed around the upper part of the humerus, and the head drawn upwards; extension was then suddenly remitted, and the bone slipped into its socket. After a short stay in the hospital, and proper confinement of the shoulder, the patient was discharged with full use of his arm.—*Lancet, 12th July* 1851.

Extraction of Foreign Bodies from the Bladder.—The great difficulty of extracting foreign bodies (not calculi) from the bladder, has led our principal authorities to lay it down as a maxim, "that it is better in all cases to cut into the bladder than to attempt extracting the foreign body by the natural passages." M. Leroy-d'Etiolles, on the other hand, has clearly established that the difficulty depends on the imperfection of the instruments hitherto used for the extraction of such bodies. With proper instruments, such as those employed by M. Leroy-d'Etiolles, a great variety of foreign bodies may be extracted from the bladder through the urethra, and the danger of lithotomy avoided. Since 1841, M. Leroy has performed fourteen operations of this kind, and extracted from different individuals, "the handle of a mustard-spoon, two hair-pins, seven bougies or catheters, two branches of a *brisé-pierre*, and several splinters of bone, which had become neuclei of stones, from *men* wounded during the revolutions of February and June."

It were impossible to describe the great number of instruments invented by M. Leroy for the above purpose, because they vary with almost every case, according to the nature, size, and form of the obstacle to be removed. It may, however, be mentioned, that M. Leroy, with great liberality, offers to lend them to any surgeon who may have occasion to use them. They will be furnished by M. Mathieu, instrument maker, Rue de l'Ancienne Comedie.—*London Medical Times, from Bul. de l'Acad.*

Fracture of the Neck of the Humerus.—M. Lenoir presented to the Surgical Society of Paris a pathological specimen taken from the body of a woman aged 83, the patient having died three months after the accident. The nature or extent of the injury had remained doubtful. On examination of the body, a fracture of the anatomical neck of the humerus was found. The head of the bone had torn through the capsule,

and was lodged in the subscapular fossa. A fracture of the surgical neck was nearly consolidated. The upper fragment was attached to the edge of the glenoid cavity by a portion of ligament. This cavity was nearly filled up by fibrous tissue.

MM. Maisonneuve and Larrey remarked upon the rarity of this kind of accident, and observed that its diagnosis is difficult.—*Dub. Med. Press.*

Case of Epilepsy Treated by Tracheotomy. By W. Cane, Esq.—Dr. Marshall Hall had suggested on several occasions, and especially in conversation with Mr. Cane, that as the attack of epileptic or other convulsion implied closure of the larynx, with expiratory efforts, the attack of convulsive epilepsy would be prevented by tracheotomy. Mr. Cane was summoned, on Feb. 1, 1851, to a boatman, aged 24, who had become subject to violent fits of epilepsy, one of which had just occurred in so extreme a form as to leave him in a state of deep apoplectic coma and asphyxia, inspiration being performed only "by seldom and short catches, whilst the veins of the head and neck were everywhere visible and greatly distended." This state had continued nineteen hours. "Feeling convinced," Mr. Cane observes, "that the patient must shortly expire, and that the root of the evil was in the closure of the larynx, I at once proceeded to open the trachea, a matter of no small difficulty, on account of the twisted state of the neck, the engorged state of the vessels, and the constant action of the muscles. The operation of tracheotomy was performed, and the tracheal tube is kept in the trachea to the present time. The relief to the patient was immediate; the air passed into the lungs, the state of spasm subsided, with the turgid condition of the head and neck, and the patient soon recovered his sensibility. This was not the only gratifying result: although the poor man had experienced his epileptic seizures in increasing violence during seven or eight years, and recently thrice a week, he had not had, up to April 1,—a period of two months,—any return of them. More recent accounts of the patient, who is now in Staffordshire, confirm the former report; the tube is still kept in the trachea and the epileptic seizures have not returned."—*Medical Times.*

MATERIA MEDICA AND THERAPEUTICS.

Case of Poisoning with Sulphate of Iron.—A case of suspected poisoning is reported in the Annales d' Hygiene, for January, 1851, in which sulphate of iron was detected in sufficient quantity in the stomach and intestines, to warrant a verdict of guilty in the case.

Cases of Poisoning by Cyanide of Potassium and Cyanide of Silver.—It appears that, within a few years past, a liquid of a very poisonous nature, composed of cyanide of potassium and cyanide of silver, dissolved in distilled water, is sold in London, chiefly for the use of utterers of base coin. Cases of fatal poisoning from this article have been from time to time reported, and Mr. Letheby, in the London Medical Times,

12th July, 1851, gives the details of two additional cases. He states that "most of the cases of poisoning by this liquid have occurred among those who are engaged in the manufacture of base coin, and it is much to be regretted that a poison of so deadly a character should be accessible to a class of persons who are not over scrupulous in their dealings, or even cautious in their habits. It is sold to these persons at the charge of fourpence an ounce; this quantity is sufficient to kill four individuals, and consequently, if murder were contemplated, it might be done at the rate of one penny per head.

The symptoms produced by the liquid are a little different from those which arise from the action of hydrocyanic acid, from pure cyanide of potassium, or even from cyanide of silver; for, in the first place, it does not commonly produce vomiting, and, in the second place, it does not generally cause convulsions, but, on the contrary, it occasions paralysis, with a perfect prostration of all the vital powers, and finally, death by coma. On making a post-mortem examination of the body, we find that the lungs are highly congested, that the bronchial tubes and pulmonic cells are filled with a frothy mucus, and that while the right side of the heart is gorged with black fluid blood, the left is empty, showing that the arrest of the circulation took place at the lungs.

On a Substitute for McMunn's Elixir of Opium. By EUGENE DUPUY, Pharmaceutist, New York.—Within a few years the use of this preparation of opium has been much extended in the United States, through the medium of the press, as well as from the commendation of a numerous class of our practitioners, who found it to possess a sedative property which the ordinary Tincture of Opium does not possess in a similar way. Yet many amongst them reluctantly made use of it, from the fact that its mode of preparation was kept from the public, and that the usual abuse of such preparation, fostered by *directions for use without the need of medical aid*, by mothers, nurses, etc., was a great objection to its employment by that class of practitioners who want to *know, not only* what is the effect of the medicines they administer, but also, what are their component parts, and how they are prepared. Having such men among the physicians honoring my establishment with their custom, I have endeavored to prepare for their use, substitutes for some of the nostrums possessed of some efficacy. As a result of my endeavors, I will state that my substitute for McMunn's Elixir has been tested for about six years, and has been found to possess the sedative property peculiar to it, without any of the unpleasant effects attributed to Laudanum.

The late Dr. Smyth Rodgers, formerly Professor in the New York College of Pharmacy, during his painful illness, had frequent recourse to it, and even preferred it to McMunn's preparation, according to his attending physician's statements, although he had, at first, great reluctance to try anything else. An advantage in my substitute is, that its manipulation is exceedingly simple, and that a country physician having at hand the necessary ingredients, can prepare it as well as the most expert pharmaceutist. I prepare it as follows:

Opium - - - - -	ʒx.
Water, - - - - -	q. s.
Alcohol, 95 per ct.	ʒiv.

The opium is to be made into a thin pulp with water; the mixture allowed to stand in a cool place 48 hours, then transferred into an elongated glass funnel containing filtering paper; a superstratum of water equivalent to the bulk of the whole mass is added. When 12 ounces of liquid have been filtered, the alcohol is added to the filtered solution.*

About two-thirds of the substance of the opium is contained in the solution; the residue consisting chiefly in resin, caoutchouc and narcotina, together with the ligneous matter. Consequently, my substitute is nothing more or less than an aqueous solution of opium, nearly free from narcotina, preserved by alcohol.

Various names could be devised for it, but as it is intended to represent an article already used under a popular name, perhaps the appellation of "Elixir of Opium" might be retained for it, if no other be suggested better adapted.—*American Journ. Pharm.*

[The unpleasant effects of ordinary tincture of opium when administered to certain patients have long since originated attempts to modify that preparation; witness the *denarcotized* laudanum, Battley's sedative solution, and the preparation suggested by the late Mr. Duhamel, (Amer. Journ. Pharm. vol. xviii. p. 16,) which last is almost identical with the "Elixir" of Mr. Dupuy. The latter, however, has the advantage in more completely exhausting the opium and in being less alcoholic when finished. In common with many others, we have given an occasional thought to the probable mode of preparing the so called "McMunn's Elixir of Opium." It contains meconate of morphia, and hence is prepared with *neutral* solvents, so as not to disturb the natural state of combination in which the morphia exists. In glancing over the long list of the constituents of opium with the view of singling out those to which the unpleasant effects of laudanum may be attributed, perhaps none are more obnoxious to suspicion than the odorous principle, resin, acid extractive, thebaina, and perhaps codeia, and narcotina to some extent, although O'Shaughnessy and others have shown that it is extremely doubtful whether the latter really possesses any disturbing quality of the kind. By the following process, a solution of opium can be made, deprived almost wholly of the principles it is desirable to avoid, and presenting the morphia in the form of its natural salt:

Take of Opium in powder, ten drachms (troy,)
" Ether,
" Alcohol, each; four fluid ounces,
" Water, a sufficient quantity.

Macerate the opium in half a pint of water for two days and ex-

* The proportion of opium is the same as that in Tinct. Opii of the U. S. P.

press; subject the dregs to two successive macerations, using six fluid ounces of water each time, with expression, mix and strain the liquors, evaporate to two fluid ounces, and agitate the liquid with the ether several times during half an hour. Then separate the ether by means of a funnel, evaporate the solution of opium to dryness, dissolve the extract in half a pint of cold water, pour the solution on a filter, and after it has passed wash the filter with sufficient water to make the filtrate measure 12 fluid ounces, to which add the alcohol and mix.

The same result was arrived at by first digesting the powdered opium in ether at several macerations, until it was exhausted, then drying and exhausting it with water. The aqueous solution was evaporated to dryness and then re-dissolved, filtered, etc., as in the above.

The ethereal liquid was evaporated at each instance:—that obtained directly from the opium yielded a brown crystalline extract, weighing 22 grains; whilst that resulting from washing the solution of opium, afforded acicular crystals and groups of larger crystals in stellated form, with a little brown extract-like matter around the edges, amounting to two grains, and having but little odor, and which exists in the elixir of Mr. Dupuy. These crystals are not reddened in the slightest degree by nitric acid, which dissolves them with a yellow color. In this treatment, the ether removes all that the water has dissolved of the thebaina, the meconin, a part at least of the codeia, the odorous principle, meconate of narcotine, and fatty matter. The ethereal extract obtained directly from the opium, contains nearly the whole of the odorous matter and fatty matter, besides the narcotine, free and combined. The evaporation to dryness, and re-solution in water, removes the ethereal odor, and separates a portion of acid resin and extractive. Landerer, in another part of this number, speaks of the nauseating and other unpleasant effects of the exhalations from poppy plantations during the collection of the opium. May not the odorous principle of opium have something to do with this effect, and may not the removal or loss of this in the so-called *denarcotized laudanum*, and in *old opium pills*, be at least partially the reason of their diminished tendency to produce nausea and headache? Mr. Redwood considers the "sedative liquor of Battley," to be an aqueous solution of opium evaporated to dryness to get rid of the acid resin, redissolved in water, and a small portion of spirit added to give it permanence.]—*Ed. Journ. Pharm.*

Aloine, the Cathartic principle of Aloes.—Messrs. T. & H. Smith, report in the Monthly Journal of Medical Science, Feb. 1851, the discovery of a new principle in Aloes, on which the cathartic properties of the drug appear to depend. *Aloine* is a neutral crystalline substance, of a deep yellow color, soluble in very small quantity in cold water, readily soluble in hot water, alcohol, alkaline liquids, acetic ether, and acetic acid. It produces the cathartic action of aloes in doses of from one to two grains, and there can be little doubt of its being the active principle.

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ORIGINAL COMMUNICATIONS.

Lectures on Scarlet Fever. By CASPAR MORRIS, M. D., late Lecturer on Practical Medicine in the Philadelphia Medical Institute.

LECTURE VIII.

While, as we have seen, death occasionally defies our best directed efforts, and terminates the course of even *simple* scarlet fever, either as the result of some unexpected local inflammation, or, more often, of one of the sequelæ of the disease; and with greater, though still varying frequency, occurs in all stages of the *anginose* variety—the *malignant* form more often sets at defiance the utmost energy of treatment, even when directed by the most consummate skill. Your memory will not have failed to retain the melancholy picture of its ravages in the earlier period of the settlement of this country, as drawn by Dr. Kearsley; and similar vestiges of its progress have been left in all parts of Europe, as well as in every age, of the diseases of which we possess any history sufficiently accurate to enable us to distinguish

them clearly. The very term *malignant*, conveys, even to the unprofessional ear, the idea of great danger, and in the language of medicine is meant to express a great tendency to the prostration of the vital forces. The knowledge of the lethal character of this form of the disease, should, however, lead to no despondency on your part, but rather stimulate you to more determined effort to rescue the patient, and increase the triumph of medical science. There are many other diseases which partake more or less, at different times, of this tendency to prostration. Between them and malignant scarlet fever, there is this, however, very important point of difference, that in this the local lesions are very severe, and often in themselves sufficient to cause death, even though the vital energy were not impaired by the peculiar character of the case.

A theory which taught that in this, as in the kindred forms of fever characterized by the same tendency to rapid decline of vital power, there was a previous stage of excitement of greater or less intensity, upon which the subsequent depression depended, not as a mere sequence, but as the effect upon a cause, was at one time generally received, and exerted a most deleterious influence on the interests of medical science. Discarded now by most authorities from its position in connection with other fevers, it still exhibits some lingering traces of its influence in a few of even the more modern writers on this disease. Those who adopted this view, recommended in strong terms the prompt resort to an antiphlogistic treatment of the early stage, under the impression of the fallacious hope that by such measures they would diminish the primary reaction, and thus avert the consequent depression; and there are not wanting authors of even a recent date, who still teach this erroneous view; and who strongly recommend the prompt resort to bleeding, vomiting, and purging. When called early to these cases, they do not hesitate to direct an antimonial emetic, followed by an active mercurial purgative, nor do they shrink from a prompt and decided bleeding if these fail. They assert that "this treatment, if adopted at the onset of the symptoms, will generally, not only moderate the fever, but shorten the duration and violence of the disease."

Nor is this view, and the practice founded on it, confined to Eu-

ropean physicians. One of the most authoritative of our own writers on the diseases of children, my friend Dr. Condie, has adopted them to their full extent, and claims for his practice a degree of success which justifies the positive terms in which he commends his views. "In a table of two hundred and sixty-eight cases, occurring during different epidemics of considerable extent and severity, and treated on the plan laid down by him, (into which bleeding, calomel in full doses, and castor oil with spirits of turpentine, as purgatives, enter,) two hundred and twenty-three recoveries, and forty-five deaths are enumerated." Dr. C. asserts of the treatment he recommends, that "when judiciously carried into execution, it is calculated to disarm the disease of its 'malignancy' and to prevent the necessity for a resort to powerful cordials, tonics and antiseptics, in the advanced period of the attack, to remove the putrid symptoms when they show themselves." "The bold and indiscriminate use of the lancet," Dr. C. "strongly objects to; but of the good effects a cautious use of blood-letting in the manner and under the circumstances directed, is calculated to produce, he speaks from actual observation." "It is," adds Dr. C. "unquestionably, in a large number of cases, the only 'restorative and tonic' upon which any confidence can be placed." In thus setting before you the testimony of Dr. Condie, I have designed to furnish you with the strongest statements in favor of a well directed antiphlogistic treatment.

I need not repeat what I have already told you when treating of the other forms of this disease, nor inform you again that, believing the primary influence of the cause to be depression, I cannot adopt the view which assigns to its first impression a sthenic character. If bleeding, and antimonials, and purgatives are inappropriate to the simple anginose form, much less are they required in that now under consideration; and Dr. R. Williams, after a careful investigation of the history of the epidemics which have prevailed from 1763 to 1834, asserts, with regard to scarlet fever in general, "that the chances of recovery are diminished by the practice of bleeding, in the ratio of nearly four to one, as compared with the chances supposing the patient not to have been bled."

With this expression, my own observation is coincident, and

you will find my views sustained by not a few authorities of deserved repute. Dr. Fothergill, than whom a more accurate, careful observer, or more honest writer, cannot be found, when he sums up his views of the practice and treatment of this disease, of which it is evident he saw the *malignant form*, asserts, "that a cordial, alexipharmic, warm regimen has been found by experience to be of the most use in such cases," and condemns as injurious, "bleeding, purging, and antiphlogistics liberally employed." He says: "In some of the first cases I met with, the quickness of the pulse, the degree of heat, the apparent inflammatory redness of the eyes and face, and pain in the head, sometimes urged me to order bleeding, especially if there were any marks of plethora; but in these cases it did not appear to have any advantageous effects; so that notwithstanding the vehemency of the symptoms above mentioned, it seems proper in general to omit this evacuation."

Dr. Kearsley, speaking of the disease as it appeared in Philadelphia in 1746, says: "The pulse was generally full and quick, yet attended with some remissions and even sinkings, but it most commonly kept up those deceiving strokes which sometimes but very improperly indicate the use of the lancet." . . . . . "Although most of the symptoms in the beginning of this disease, as well as the fulness of the pulse, appeared to point out to us the necessity of bleeding, yet, should we have complied with the indication, it would have proved a fatal error." That this opinion was the result of observation is proved by the remark, that "the blood which has been drawn away in these cases has been often observed to have a tenacious glue upon the surface, and yet, nevertheless, it has been found underneath to be broken, loose and divided in its texture, and has also thereon very evident marks of a putrid gore which must and does increase by bleeding." "One bloodletting may make a difference of a change from a texture that, with proper management, would have carried a patient through the sickness with safety, to no texture at all, but a total dissolution of all animal fluids which must in course terminate in death. Of such vast consequence is this one article of bleeding, that it has been my choice to give this caution against it in the strongest terms." Dr. Burrows in an interesting article on this disease, in the library of Practical Medi-

cine, remarks of the malignant form, that, "it quickly indicates its formidable nature by the sudden depression of the vital powers. If bloodletting from the arm be a remedy of doubtful propriety in the two former varieties, it is here hazardous in the extreme." Dr. Chapman says, "The abstraction of blood appears to be required by the loaded state of the organs, and contraindicated by the depression of the vital energies. My own conviction is, that it should not be hazarded, unless reaction is pretty firmly established, the circulation in some force, and the skin warm, and even then is to be resorted to with extreme circumspection." And with regard to the general applicability of bloodletting as a remedy in any form of Scarlet Fever he says: "it is true that the loss of blood has no direct curative tendency in the disease, it only abating action, without changing or subverting it; and is usually not well borne to any extent. It is not safe to detract it with the same freedom as in more purely phlegmasial affections, or perhaps, to the amount that the existing indications in the case would seem to demand. Collapse, frightful and sometimes even fatal, I have repeatedly seen to result from an abuse of the practice, and it is always hazardous in an advanced stage of the disease."

Dr. J. Forsyth Meigs, in his able work on the diseases of children, after producing the testimony of many distinguished writers on this disease to the doubtful tendency of a resort to bloodletting, says: "On the whole, it is clear, I think, that the weight of evidence is against bloodletting to any considerable extent, in grave cases. If used at all, it is only to be used in the earliest period, and even then with great caution. My own opinion, derived from personal experience, is as follows:—I believe that I have seen general depletion useful in several cases of the regular form, in which there was a tendency to the grave form, shown by the presence of excessive reaction, and still more by great jactitation and irritability, alternating with drowsiness and delirium. But in those sudden attacks of the disease, in which it assumes from the very start the terrible symptoms which threaten extreme danger to the patient, in which we find the child within a few hours of the onset, delirious or comatose, or laboring under convulsions, convulsive movements or contractions, in which the eruption is imperfect or scanty, or copious and of a

deep livid tint; in which in other words there are either strongly marked ataxic or adynamic symptoms, general bloodletting has never seemed to me at all advantageous, and I have several times feared that it had been injurious. As to leeches, I have never known them to be really useful but in one case, and in that they were used sparingly, and after an interval of two days. In all other cases they appeared to be without any effect."

I might swell largely the list of authors who have either condemned depletion entirely, or expressed their doubt of its fitness to the treatment and proposed its employment with caution; but I have adduced testimony enough to prove to you that observation, places depletion among the remedies of doubtful value, to say the least of it, and thus confirms the view, derived from reasoning on the nature of the disease, its origin and course, which I have endeavored to impress upon you.

But though blood-letting, antimonial emetics, and antiphlogistic treatment, are all, for the same reason, excluded from our list of remedies in the malignant as well as the other forms of scarlet fever, a simple emetic of ipecacuanha, or infusion of Eupatorium perfoliatum, the thoroughwort or bone-set, of our own meadows, may be given in the commencement of a case, with decided advantage. It evacuates the primæ viæ, and produces a strong determination toward the surface, without leaving any secondary depression of the vital forces, or exhaustion, such as follows the use of antimonials.

The action of this having been accomplished, your attention should at once be given to the support of the vital power, which will be found flagging from the very commencement in many cases, and to the arrest of the local lesions in the fauces and pharynx. The capsicum is here an agent of great value, acting at once to the fulfilment of both indications. We are indebted to the West India practitioners for the introduction of this remedy to our notice in this disease. We have been taught to look upon it as a simple stimulant, without any direct impression on the general system, and that it acts upon this in a secondary manner, through the increased energy it communicates to the stomach. My observation of its effects in these cases of scarlet fever, does not permit me to adopt this as the only mode in which it promotes the recovery of the patient. It must stimu-

late the exhausted nervous forces, if no farther than to enable the stomach to appropriate properly the nourishment presented to it. While it thus acts advantageously on the general system, the local impression on the throat is equally beneficial. Though the first sensation produced is one of increased heat, this soon passes away, and is followed by a sense of relief from the tension and soreness which aggravate, so materially, the sufferings of the patient.

I have conducted many cases to a favorable conclusion by these remedies alone, giving the capsicum in the manner suggested, when treating of the form of the disease last under notice, and supporting the strength of the patient by animal broth.

Purgatives have been recommended in this as in the other forms of the disease, even by those who condemn other antiphlogistic treatment; especially calomel, either in combination with those articles usually united with it to secure its prompt action, or followed by castor oil and spirits of turpentine. The object proposed by this treatment, is to promote a free secretion from the viscera, and, as is supposed, remove a load which is thought to oppress the vital energy. The reasoning is, I think erroneous, and the practice founded on it pernicious. The congested condition of the vascular system, and the suspension of secretory action, are dependent on the diminution of the vital forces, and not the cause of that depression; and it were as contrary to common reason to bleed a porter struggling to support a load beyond his power, as to resort to any remedy which diminishes vital force in the malignant form of scarlet fever. In no instance have I seen any advantage result from the use of a mercurial in any form or stage of the disease. Mr. Colden and Dr. Kearsley, however, coincide in the assertion that Dr. Douglass of Boston commends its use, in strong terms, in the malignant form, and even urged it to the extent of salivation. I have not been able to procure a copy of the original work of Dr. Douglass. He wrote, however, at a period when the influence of mercury was thought to be almost omnipotent, and when it was employed with but little discrimination or knowledge of its character, in almost all forms of disease.

My mode of treating these cases, may be illustrated by the record of my experience in one family. It was that of a

widow who had been compelled to leave her children without protection, while she returned to England to secure a bequest. The oldest was a girl of about fifteen years.—She and two others were seized simultaneously with scarlet fever. I found her lying, insensible, on the bed, the whole surface of a mulberry hue, the pulse too frequent to be counted, perfect stupor and extreme jactitation, the throat swollen so as entirely to prevent deglutition, the fauces covered with ash colored deposit, a fœtid ichor distilling from the nostrils, the eyes injected and upturned. The two other cases presented the usual marks of the severe anginose form. I at once secured the services of a judicious nurse, and in order to call out the utmost exertion of her care and effort, I told her, that though severe, the worst case was not hopeless, and that I was so conscious that the best medical advice would be useless without the aid of good nursing, that I was willing she should have all the credit of her recovery if it were accomplished. I furnished her with a syringe, and introduced a stomach tube through the nostrils. Wine whey, beef broth, highly seasoned with capsicum, and quinine, were injected into the stomach at stated intervals, while the solution of sulphate of copper, and compound capsicum infusion were employed as local applications to the throat, by means of a syringe. Convulsions occurred within a few hours; three days she lay in the condition described, the only evidence of consciousness afforded, was in the resistance she opposed to treatment. On the fourth day the jactitation diminished, and there was a manifest abatement of the stupor, and much to my gratification, she recovered without any sequelæ being developed. The other cases were treated in the simple manner described when speaking of the anginose form, and with an equally happy result.

The application of cold to the surface, and the use of ice internally, has been advocated by some authors even in this form of the disease. I need hardly say that the sedative impression of cold, is as much to be avoided as that of any other agent, but where the skin is hot and dry and the eruption is very abundant, great benefit results from the tepid sponging, and the addition of a small quantity of vinegar or whiskey to the water is advantageous. In the first few hours of a case, or when there is still sufficient intelligence remaining to enable the patient to manage

the ice, it may be employed for the mitigation of the suffering from the angina. Several authors speak of fatal collapse following the injudicious resort to external cold.

Dr. Meigs furnishes us with a quotation from Dr. Currie, to whom we owe the introduction of this treatment, which proves that he did not consider it appropriate. The cases to which he refers as "purpurata," are those which I include under the head of malignant, and to such, Dr. C. says, "the cold effusion is scarcely applicable, and tepid effusion makes little impression. In my experience, indeed, all remedies have been equally unsuccessful. It outstrips in rapidity, and it equals in fatality the purple confluent small-pox, to which it may be compared." The internal use of ice in these cases is too often forbidden by the stupor and delirium. Where these do not prevent, it may be resorted to with the same advantage as in the common anginose form. Where there is decided ulceration and sloughing of the throat, great benefit may be derived from the injection of chloride of soda. I have never used it myself, having always relied upon the same injections in these cases as in the more severe instances of the anginose variety. The capsicum wash there mentioned, is best suited to this form of the disease. The internal use of a weak solution of the chloride of soda has been strongly recommended by Dr. Jackson of Northumberland, who reports many cases in his own practice, and that of his friends, which recovered under the use of this remedy and ice. Its antiseptic qualities have caused it to be employed internally in this as well as in other forms of adynamic fever, but, I believe, with little benefit which could be fairly attributed to this remedy alone.

No attempt should be made to separate the sloughs or detach the deposits from the mucous membrane of the throat, either by mechanical means or by harshly stimulating washes. Fatal hemorrhage is sometimes brought about by this rude interference, or the tendency to gangrene aggravated by it.

The local abstraction of blood from the neck in these cases, can not be too strongly condemned. It can no more arrest the progress of the inflammation of the fauces, than it can that of an external part tending to gangrene. The bites of the leeches do not heal, but continue to permit the leakage of a thin bloody

serum, till they take on a low grade of inflammation themselves, which results either in sphacelus, or spreading ulcers. The remark is equally applicable to the use of blisters, which almost always, either slough or ulcerate, and have not unfrequently proved the cause of death even after the sufferer had struggled through the disease for the relief of which they were employed.

Carbonate of ammonia has been highly commended by some authors in this form of disease. One insuperable obstacle to its use, is found in the difficulty of deglutition. Even in those forms of low fever which are free from angina, the pungent character of the remedy makes it difficult of administration, and where there is much swelling or ulceration, it would be impossible that it could be swallowed, especially by a child.

Musk, too, and camphor, have their advocates in those cases where the nervous symptoms predominate. I do not believe they possess any special virtues which entitle them to favor, and prefer depending on a few tried and proved friends, to the resort to many other articles of questionable powers. The rational indications are met by those I have recommended, and on them you may safely rely.

In those *irregular* cases which I have described, it is impossible to direct any plan of treatment. There is no specific for scarlet fever, even in its well developed forms. You will observe, I have endeavored to indicate to you the symptoms, and to deduce from them a treatment based on the known rules which regulate the human economy in health and disease. Where these laws cease to exert a control, the physician must be guided by his own discretion in each case as it presents itself.

Warm, stimulating, spirituous baths, or vapor baths, may be employed to invite the diseased action to the skin, and thus to liberate the central nervous system from the load by which it is oppressed; and where there is much tendency to collapse, warm wine whey or brandy may be given internally.

In those cases where the skin is hot and dry and yet devoid of eruption, and there is great restlessness, I have used the Dover's powder with advantage. Capsicum, too, in some cases of this kind, has appeared to confer benefits which might be supposed almost to entitle it to the character of a specific; and should never be omitted.

It may not be amiss to furnish you with a succinct statement of the plan of treatment, which with the reasons on which it is founded, I have thus spread before you.

Simple Scarlet Fever without complication, may be confided to cool drinks, cool air and sponging the surface, with light diet. Where the fever is more intense, a weak solution of carbonate of soda, with a small quantity of sweet spirit of nitre, may be given.

During convalesence, and until the skin has resumed its healthy action, the most vigilant care is required to avoid too great license in diet, and exposure to atmospheric changes.

When the case is complicated by the occurrence of delirium, convulsions, or irregular muscular contractioms, these symptons may best be combated by cold to the head, and sponging the surface.

The *anginose* affection is best treated by the free use of ice, and gargles of cold water, internally; and emollient poultices or wet cloths externally; the general treatment being the same as in the simple form, and the caution about diet and exposure equally, or even more important.

The *malignant* form requires that the first symptoms of failure of vital powers should be met by a prompt resort to the use of capsicum, quinine, wine, and nourishment; while the local affection is to be treated in the same manner, and by the same remedies as in the anginose ferm. In the very beginning ice may be used; but when the ash colored deposits appear, or sloughing commences, nothing will equal the benefit you will derive from the use of the capsicum infusion, alternated with a solution of sulphate of copper; care being taken in using the latter, to avoid passing so large an amount of it into the stomach, as shall produce vomiting, and thus depress fatally the already exhausted forces.

Free ventilation is of the utmost importance in all the forms of this disease; but in the malignant form its value is beyond estimation. Nor is there any danger from the influence even of cool draughts, so much dreaded by parents and nurses during the progress of the primary fever.

I am fully aware that many condemn the views I have here presented to you, and that it is not uncommon to find the advocates of the antiphlogistic treatment, attributing the mortality of

this disease to the stimulating treatment I have thus recommended. Improperly employed it is certainly pernicious. It should never be resorted to except where the feeble pulse, languid circulation, livid or violet color of the eruption, and sloughing throat give unmistakeable evidence of the failure of vital power. The resort to the treatment appropriate to this state from an apprehension of its approach, is, indeed, likely to induce it. It is even more to be deprecated than the opposite extreme. Where bleeding, the application of cold, or the exhausting treatment has reduced the patient, there is still room for hope that reaction may be produced by the resort to the proper remedies. But where the nervous energy has been exhausted by the addition of artificial stimulation to the febrile excitement, a state of prostration from over excitement is induced for which we have no remedy. While, therefore, I desire to caution you against the resort to those measures which directly exhaust the vital power, I would enter an equally strong protest against the premature employment of stimulating remedies. If, as in the case I have described, the malignant symptoms are present from the first, adopt immediately the stimulation necessary to counteract their tendency; but do not let the fear of its future occurrence induce the premature resort to them as a preventive. This, like bleeding beforehand to avoid inflammation, will only precipitate or make more certain the result which is dreaded. These remarks are especially applicable to the use of quinine. The wine whey is transient in its influence, the capsicum gives rise to no febrile reaction, but the quinine produces a more permanent impression upon the nervous system, and has a stronger tendency to excite local inflammation. Properly applied, it is the sheet anchor of our hope; the very power which renders it so, causes it when misused to be most pernicious. It should be given in full doses at long intervals, leaving the stomach free to receive the animal broth, wine whey, or brandy. These latter are most conveniently given in arrow root or some of the usual farinaceous articles of diet.

Before passing to the consideration of the sequelæ of the disease, and the proper treatment of them, some notice must be bestowed on the question, how far it is possible to remove the susceptibility to the impression of scarlet fever. It is now many years since it was announced that the administration of small

doses of belladonna to those who were exposed to the influence of this cause, whether epidemic or contagious, produced an almost entire immunity. The source from which the suggestion came, though entirely destitute of authority, was less calculated to excite suspicion than the reasoning by which the assertion of its power was supported.

Its use was first suggested by Hahneman, who supposed that in the affection of the throat, and redness of the face, produced by an *excessive dose* of this narcotic poison, he discovered a train of symptoms similar to those of scarlet fever, and hence inferred that its use in *infinitesimal doses* would produce a condition similar to that caused by the miasm, and prevent the real disease. No reasoning could be less logical. Knowing how many escape when exposed to the influence of this specific poison, much incredulity as to the effect of the remedy has been entertained. Still it has been extensively tried, as well in this country as in Europe, and the testimony to its prophylactic influence cannot be disregarded.

MM. Rilliet and Barthez, gave us the report of Gumpert, who employed it in more than twenty families with entire success. Berndt found that of one hundred and twenty-four children to whom it was administered during exposure, only fourteen took the disease; and Hillenkamp had still better results, only five having sickened out of one hundred and twenty who took the belladonna. Our own medical journals contain reports of the same favorable character. Dr. Condie, however, asserts that having tried it in repeated instances, he never found it to produce the slightest effect in mitigating the character or preventing the occurrence of scarlet fever.

There are so many sources of doubt, that it is impossible, in the present stage of our experience, to give a positive opinion. The only field for a crucial experiment is some large institution for orphans or destitute children, where it can be tried, while all other means of prevention are avoided. Larger numbers than can be found in private families, and more careful observation are necessary to settle this point. In the mean time, though the reasoning of Hahneman is fallacious, it is quite possible that the influence on the nerves of organic life, of a slight narcotic, may so preoccupy them that they shall not yield to the impres-

sion of the epidemic or contagious principle. If it be proven to have this effect in scarlet fever, it should be equally available in the case of other diseases which are diffused by the same agency. Professor Chapman long since drew attention to the effect of the occupation of the stomach by food, in preserving those who were exposed to miasmatic impressions. It were impossible to keep the stomach always filled with food; but the nervous system may be kept constantly affected by the narcotic, and, if given in quantities sufficiently minute, without inconvenience. I have never tested the effect myself, not having had an opportunity which was sufficiently guarded from sources of uncertainty. Though I have thus drawn your attention to it on account of the positive assertions of its advocates, and have endeavored to exhibit the manner in which, if at all useful, it operates, I have no faith in the prophylactic power of this, or any other agent. The mode of exhibition recommended, is to suspend *three grains* of the extract of belladonna in *one ounce* of water; of this, *two* or *three drops* are to be given twice a day, to a child under twelve months old, adding one drop for each additional year of age.

(To be continued.)

Diameters of the Fœtal Head, from measurements made in the Dublin Lying-in Hospital. By ADDINELL HEWSON, M. D., of Philadelphia. Communicated in a letter to Dr. MEIGS.

DEAR SIR:—Knowing the great interest which you always take in everything connected with medical science, and particularly with the branch of Obstetrics, I have availed myself of a short relaxation from my hospital duties, to draw up for you the results of some measurements of fœtal crania, which I made last Spring whilst an interne of the Dublin Lying-in Hospital. It affords me particular pleasure to communicate the results of these observations to you, as it was from the perusal of your recent work on Obstetrics that I was induced to make them.

On comparing the estimates of the diameter of the fœtal head which you have given, with those contained in foreign works on Obstetrics, a great difference will be observed. Your diameters are far greater than those given by any foreign author. The question therefore presented itself to my mind, is the esti-

mate given by those abroad too low, or is there really an ethnological difference? The accuracy and extent of your own observations precluded all thought of your estimates not being correct, and I therefore availed myself of the occasion which presented, to ascertain, as well as I could, wherein consisted the difference.

For this purpose I extended my observations to one hundred and sixty-six children, born in the hospital, between the 10th of March and the 13th of April last. I did not select cases, but made my measurements promiscuously, independent of age or sex, of every child born alive, and at full term, in the Institution, between those dates.

I employed in making these measurements, a pair of delicate turner's calipers, admitting of accurate adjustment, and an ivory scale marked to the twentieth and fiftieth of an inch. Each measurement was made with the greatest care, within twenty-four hours after the birth of the child, and registered at the time.

The sum of my measurements of the biparietal diameter, was six hundred and three inches and eighty-eight hundredths, which gives a mean of three inches and six tenths, for that diameter. The sum of the occipito-frontal diameters was seven hundred and seventy-seven inches, and seventy-seven hundredths; the mean, four inches and sixty-eight hundredths. The sum of the occipito-mental diameters was eight hundred and eighty-seven inches and eighty-three hundredths; the mean, five inches and twenty-eight hundredths.

That you may consider these averages very just, I will mention the fact that there was not a very great range between the measurements. Thus, for instance, in the 166 biparietal diameters, but one exceeded four inches, (the mean being 3 6-10th inches.) You mention having met with sixty-eight exceeding that number in a series of one hundred and fifty measurements, the mean of which was three inches and eleven twelfths. The occipito-frontal diameter was five inches in six, out of my hundred and sixty-six, and in fifteen it exceeded that—the greatest being five and two-tenths. The occipito-mental attained six inches in three cases out of the hundred and sixty-six, in one other it reached six inches and one-tenth.

Having thus detailed to you the results of my measurements,

permit me to draw your attention to the manner in which they will compare with the estimates given in standard foreign works. The followiug table contains the estimates given by some of the best English and French authorities. I have reduced the fractions in their figures to decimals, as my own are given in that scale. To the end of the table I have added my own estimates, that you may see at a glance how they compare:

	Bi-parietal.	*Occipito-frontal.*	*Occipito-mental.*
Baudeloque, . .	3.34 to 3.50	. . 4.50	. . 5.50
Velpeau, . . .	3.50	. . 4 about	. . 5
Cazeaux, . . .	3.50 to 3.75	. . 4.25 to 4.50	. . 5.25
Burton, . . .	3.50	. . 4.30	. . 5.60
Ashwell, . . .	3.50	. . 4.50	. . 5.25
Murphy, . . .	3.50	. . 4.50	. . 5
Churchill, . . .	3.50 to 4	. . 4 to 4.50	. . 5
My own, . . .	3.60	. . 4.68	. . 5.25

You can readily see that, although mine are the highest, there is not a great difference amongst them all, but, that this difference is greater when you compare my estimate with those of Baudeloque and Velpeau. M. Cazeaux has not, in reality, given a mean, but has only given the points between which it may be found, and I might with propriety have omitted his measurements altogether, had I not wished to give you an opportunity of comparing mine with those of the most recent of French authorities. I have also very much to regret that Dr. Churchill has done the same, for he is the best of authorities in Ireland, and his well known accuracy of observation would, I believe, by its weight, have confirmed my results.

Now let me compare my results with those of your own observations in this country, and that such a comparison may be a perfectly just one, I will take the mean of a series of my measurements, equal in number to that of which you have given the mean.

You give the mean of a hundred and fifty measurements for the biparietal diameter, as three inches and eleven-twelfths, or 3 inches 88-100ths. The mean of the first hundred and fifty of my measurements, is 3 inches 63-100ths, the differerence is 25-100ths, or precisely a quarter of an inch. Your mean for the occipito-frontal diameter, from the same number of measurements,

is four inches and ten lines, or four inches 83-100ths. My mean is 4 inches and 68100ths; the difference is 15-100ths, or about 1-7th of an inch.

You give the mean occipito-mental diameter, from 126 measurements, as five inches and five-tenths. The mean of the first 126 of my measurements of that diameter, is five inches and 36 hundredths; the difference, 14-100ths, of an inch, nearly the same as for the occipito-frontal diameter.

Thus you see that there is a very essential difference between our results, a difference too great to be attributable to inaccuracy on my part alone. I am conscious of having taken the greatest care in all my observations, and although my estimates are higher than those to be found in any foreign work, still they lead to the conclusion that there is really some other cause than inaccuracy to account for the difference; and may we not seek for it in an ethnological difference in the cranial development of the fœtus? This is certainly a question of interest, but it is not one which a single series of observations like my own can solve. With much respect I remain,

Yours sincerely,

ADDINELL HEWSON.

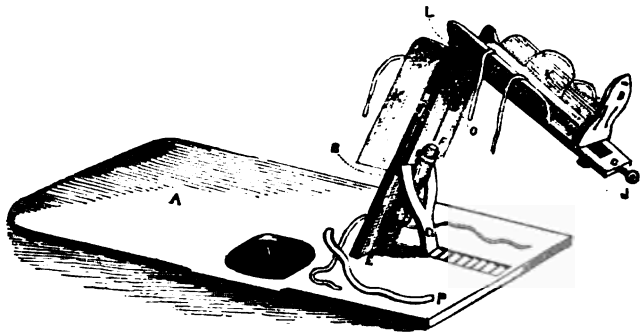
Pennsylvania Hospital, Sept. 13th, 1851.

Apparatus for the treatment of fractures of the inferior extremities. By D. H. AGNEW, M. D., of Lancaster Co., Pa.

In originating an apparatus for the treatment of fractures, there are several considerations which should claim attention, the most prominent of which, are:

The decubitus most comfortable for a protracted confinement; the position in which the limb should be placed in order to diminish or remove muscular contraction, one great cause of displacement; variety of adaptation, so that the same splint might be applicable to a number of casualties, or fulfil a diversity of indications, and simplicity of construction. Annexed is furnished the cut of a splint which the writer has had constructed, and which, upon trial, he thinks will be found to answer all the ends

to be had in view in the management of fractures of the inferior extremities.



EXPLANATION.

A is a board 28 or 30 inches in width, and 3 feet 6 inches in length; B is a board 17 inches in length, 7 inches in width, tapering upward to 6¼ inches, and secured by a couple of stout hinges at E. O represents a second, notched 3 inches from its upper extremity, sufficiently deep to make the plane of the internal surface correspond with that of B, and extending down along the back of the latter 8 inches, with a narrow slit cut out, through which extends a rod, with a thumb-screw working on its extremity, in order to keep it accurately in contact with B. C is a board either cut out in its centre, or otherwise deeply excavated, secured to O by a hinge L 26 inches long and 6 inches wide, tapering forward to 4½ inches. D is a foot-board. F a female screw, secured to A and O. G, a forked support hinged to B, and maintaining it at any angle or inclination by working in the rachets seen in front. H an oval piece, cut out of A, beneath which is to be placed a bed pan. There should be another on the opposite side. The opening as represented in the cut, is a little too high up, and also too near the edge of the board A. J a small wood-screw fastened to the foot-board D. K K K, sides or wings secured to *b* and *c* by hinges. P a stout piece of webbing to surround the pelvis.

Application.—Place the apparatus upon a common bed stand with a sloat bottom, or if none such be at hand, upon any firm place as a settee, or even the floor, blocking up the body board A, to any inclination desired; throw over it either a mattress or several folds of coverlets, turning in the edge (if the latter be used) diagonally, so as to leave a spot over the slide H uncovered. A second may be folded so as to fill up the vacancy; (the object,

it will be readily seen, is to have a portion moveable in order to accommodate, when necessary, a bed pan.) If the mattrass be used it would be better not to allow it to extend farther down than the slide; having some folds of quilts placed over the unoccupied space to level up, and easily removed when required. If used in any public institution, it would be much more convenient to have the mattrass blocked out over the slide, on either side. Next take two pillows, or a soft stuffed pad, sufficiently long to extend the length of the splints B and C. Upon the splint *c*, 2 inches in advance of the joint, place a second, (wedge shaped) 8 inches in length, and 1 or 2 inches thick at the end next the joint. The design of this compress or pad is to take off all possible pressure from the ham. Having things thus arranged, you place your patient on his back upon the mattrass, bend the thigh at an angle with the body, and place it against the splint B, then bringing the leg at a right angle with the thigh, place it upon the splint C. Next take a roller, and passing it round the foot and ankle in the form of the figure 8, until it attains a considerable thickness, stick securely to it on either side two good stout pieces of tape, and fasten the same to the foot-board *D*. By means of the transverse strap P you secure the pelvis to the mattrass, after which knot the other straps, taking care to interpose between each and the limb a soft compress to take off pressure. Having matters thus adjusted, should it be necessary to make traction upon the fragments of the os femoris with a view to prevent overlapping, commence turning the screw *F*, which by lengthening the splint any degree of force whatever, may be exerted. Or suppose you have a very oblique fracture of the tibia and fibula, in consequence of which, it is necessary to apply antagonistic forces to secure the proper length, all the alteration necessary is to place the wedge shaped compress beneath the thigh, a short distance above the popliteal space, the thick end uppermost, and by simply turning the screw *J* make any degree of extension requisite. Or imagine a fracture of both femur and bones of the leg, and in consequence of unequal degrees of resistance, requiring unequal degrees of force, in order to keep them in a proper position: how easily may this desideratum be accomplished without any interference whatever. Any lateral displacements are effectually prevented by closing up the sides of

the splints K, K, K, which are attached by hinges as in the old fracture box, and interposing between the wings and the limb bags filled with bran.

The principle, it will be seen from the above explanation, is to make the body, by its weight, act as the counter-extending force, and the leg, as the point of extension in fractures of the femur; and in fractures of the tibia and fibula the thigh that of the former, and the foot of the latter force.

We think the following advantages may be claimed for this over other splints. A position of the body and limb attended with the greatest comfort for a prolonged confinement, and one calculated to obtain the greatest amount of muscular relaxation. The variety of postures or angles at which either the body or limbs may be placed, the effect of which change, however slight, being always a source of relief to a patient. Our being able to dispense with the perineal band, which so frequently produces troublesome excoriations, especially in cases of children and females; also avoiding chaffing the ankle, which occurs when it becomes necessary to apply a strong extending force. The ease with which evacuations from the bowels, may be received and removed without disconcerting the limb. Its applicability to a number of fractures occurring in the same limb, and the absence of all necessity for changing and readjustment.

P. S. Any medical gentlemen desirous of testing the apparatus may be furnished with one, by addressing Mr. Gildea, No. 61 Dock St., Philadelphia.

139 N. 11th St., Philadelphia.

Case of Scirrhus of the Pancreas. By J. R. McClurg, M. D., of New Garden, Pennsylvania. Communicated by Prof. Dunglison.

Thomas J. Yeatman, blacksmith, aged 50 years, of a bilious temperament, was taken sick about Christmas of the year 1850, at which time he complained of a pain, weight or oppression in the epigastrium, which became more severe upon pressure—no appetite and yet no sickness at the stomach; a great restlessness of the system and an inability to lie in bed. The cause of this, the patient said, was the oppression in the region of the stomach.

A blister was applied over the epigastrium, which appeared to remove the pain for a day or two, but as soon as it had dried up the oppression returned. The patient was still able to walk a little. Two weeks after the first attack, he became worse, and went to bed; a physician was sent for who pronounced his disease bilious fever and treated him accordingly. At this time he complained of a continuance of all the above symptoms and of an aggravated character. He was now able to lie in bed, which for some time past he could not do;—had fever—pain in the left side over the spleen—still no sickness nor vomiting;—no disturbance of the brain or lungs;—no tenderness or pain in the right side;—the bowels were costive, requiring a large amount of medicine to produce evacuations. One week after the above attack of fever, erysipelas appeared in the face, one eye became almost closed, but after two or three days the erysipelas entirely disappeared. He was confined to his bed and room between four and five weeks, at the end of which time he became able to walk out, but was still in a very weak condition. The disease still remained in the stomach, as in the very first attack; poor appetite, no disposition to sleep. Being at this time unable to lie in bed, he sat up all night in his chair, or walked the room in order to obtain relief from the pain, which had become constant. Sometimes it would be worse in the region of the stomach, then in the left side, then perhaps in the back. He was at this time, and indeed from the first attack, unable to stand erect, but bent forward as if to relax the abdominal muscles. When the pain was most severe, the application of a warm poultice or hot salt to the seat of pain would give relief for a short time. Having been under the care of a regular physician or physicians for three months or more, and receiving but little benefit from their treatment, he visited Lancaster, and consulted a "*Dutch Doctor*," who promised to cure him; but as he grew rapidly worse in his hands, he abandoned the case, which now came under my care.

Thus on the 9th day of May, four and a half months after Mr. Yeatman was first taken sick, I saw and examined his case for the first time, and found him in the following condition. He was quite feeble, but still able to walk about the house;—his skin was dry, of a straw color; the countenance wore a wild,

anxious expression, the tongue was covered with a thick yellow coat; the breath quite foul; the pulse quick, corded and ninety per minute;—great oppression deep in the epigastric region, and remarkably tender on pressure, presenting to the eye a fulness, and to the touch a thickened or knotted condition;—a decided pulsation was perceptible in the epigastrium, caused by the pulsation of the abdominal aorta;—pain in the left hypochondriac region, also in the back; tenderness on pressure over the colon, from the caput coli to the sigmoid flexure; the bowels costive; great restlessness of the system and inability to lie in bed; he sat up all night in his chair, and had done so for the last three or four weeks; unable to stand erect, but bent forward; sat with his feet drawn up on the chair and his knees in contact with the thorax or chin; poor appetite; no sickness at the stomach; no pain in the right side nor along the course of the spine upon pressure. Cupping and blistering appeared to have little or no effect at this time in removing the pain. I gave the blue pill, extract of taraxacum and hyoscyamus, together with the iodide of potassium, without any benefit in the case. I then prescribed an aloetic and a saline purge occasionally, together with the sulphate of quinine and carb. of iron, and after administering *many* other medicines of a tonic and antispasmodic character, I gave the nitrate of silver freely, without perceiving any benefit. The disease seemed to be advancing gradually to a fatal termination notwithstanding every effort used to arrest it. The pain was becoming more severe every day; no appetite, or ability to walk without assistance; pain *now in the right side*, and over the whole abdomen. His suffering became very great. When the pain was most severe, he would get into bed, with his head and shoulders elevated, grasp one thigh with each hand, and with his feet up towards the ceiling or perhaps thrown back over his head, making the small of the back a pivot, would turn round and round in bed, groaning most mournfully and writhing as if in intense agony. And thus it would continue for hours unless relieved by large doses of opium or sulphate of morphia. The medicine which seemed to have the most influence in relieving his sufferings was the following mixture *prepared for the emergency of the case alone.* ℞. Vinegar ʒvi., saturate with the carbonate of potash, then add of the sulphate of morphia, gr.xv.

a large table spoon full to be given every hour whilst the pain continued. Two or three spoonfuls generally afforded him rest for five or six hours, when it became necessary to repeat the dose, thus keeping him under the constant influence of morphia to prevent intense suffering. Three or four weeks before his death, the hands, feet and abdomen, became greatly swollen; the urine of a very dark red color, and hiccough was almost constant. He gradually sank, as if some singular and fatal disease was seated at the very fountain of life or centre of sympathy, crushing the life slowly, yet certainly, of a strong and vigorous man. Mr. Yeatman died on the 18th of August, having been sick about eight months.

On inspection, the disease appeared to be of a scirrho-scrofulous character. On opening the abdomen, much effused fluid of a dark, chocolate color filled the peritoneal sac, which appeared to be in a diseased condition.

The liver was somewhat enlarged, hard and tuberculated; a few of the tubercles contained pus. The gall bladder was healthy, of the natural size, and contained three hexagonal calculi, each of which was about the size of a large chestnut. The cavity of the stomach, or mucous membrane, appeared to be in a normal condition—the greater curvature free from disease, but in the smaller curvature was found a large scirrhus mass, embracing one third of the stomach, the whole of the pancreas, solar plexus, the aorta and accompanying vessels, and adhering to the diaphragm, the liver, the arch of the colon and omentum. The stomach and diseased mass, were removed together from the body, by dissecting them from the above points of adhesion, which was a difficult task. The spleen was perfectly healthy, as were also the kidneys, heart and lungs. The solar plexus being involved in the diseased mass, was the cause, no doubt, of the great, very great, suffering of the patient. And as numerous branches emanate from it, which supply the diaphragm, stomach, liver, spleen, small and large intestines, kidneys, supra-venal capsules and the spermatic vessels, we need not be surprised that the patient occasionally experienced pain in these various organs. That the stomach and pancreas, the latter in particular, was the original seat of this disease, and that the surrounding organs became subsequently involved, there is not the least shadow of doubt in

my mind. The liver was implicated, no doubt, long after the above, as symptoms clearly indicate, for there never was the least pain or uneasiness felt in the right side, until about a month or two before death. The cause of the disease is very uncertain, but most likely it was produced by the patient, some two years previous to his last sickness, having carried a load of coal from the wagon into the cellar in a tub, which pressed hard against the upper part of the stomach giving him pain at the time, and ever after some uneasiness or a tired feeling in the epigastrium.

This is an interesting case on account of the peculiar symptoms developed,—there being no similar case on record, so far as I have seen—also on account of the great suffering of the patient,—the character of the pain—his position when the pain was most severe—the manner in which he sat, with his knees in contact with the thorax or chin—being unable to stand erect; the absence of sickness and vomiting, &c. and it is also interesting on account of its pathological conditions.

New Garden, Chester County, Pennsylvania, August 19th, 1851.

Three cases of Resection of Bone. By CARTER P. JOHNSON, M. D., Prof. of Anatomy and Physiology, Medical Department, Hampden Sydney College, Richmond, Va.

The following cases are reported, not because of any peculiar interest which attaches to any of them, but for the purpose of adding to the statistics with reference to an operation which has, perhaps, been too much neglected in this country.

Case 1st. Resection of the Ulna.—Rose, a negro girl, about 11 years of age, has been suffering for four years with a chronic inflammation of the right arm over the ulna. The disease was originally attributed to a fall or a blow which she received on the arm. The arm has occasionally suppurated, and from time to time, during the last year, several fragments of bone have been discharged.

When first presented to me, April 18th, 1849, there were two fistulous openings on the under side of the fore arm, and about two inches below the elbow joint, and the other about an inch lower down, through which the probe passed freely down to the denuded ulna. Neither the elbow joint nor the radio-ulnar joint

below, seemed to be involved in the disease. The general health of the child had now begun to suffer, and it was evident that she could not long stand the continued irritation to which she had already so long been subjected.

On April 21st I exsected the middle two-thirds of the diseased bone, the patient being placed fully under the influence of ether. The operation was performed by making two semi-elliptical incisions, extending from a point a few lines below the internal condyles to the styloid process of the ulna, meeting at their extremities, and including between them the fistulous orifices and the diseased integument; then dissecting away the integuments and muscles from the anterior and posterior surfaces of the ulna, dividing this bone just above its styloid process with the metacarpal saw, separating its attachment to the interosseous membrane, and completed by making the upper section of the bone with the chain saw, just below the coronoid process. But little blood was lost, and only one vessel required the ligature. The edges of the wound were then brought together by adhesive strips, and an angular splint applied, extending beyond the ends of the fingers.

With the exception of fever, accompanied with slight delirium, on the second day after the operation, which was speedily checked by a mercurial cathartic, the patient recovered rapidly, and was discharged about eight weeks after the operation, entirely well.

By adopting the operation of exsection in this case, the elbow and the wrist joints were both saved to this patient; and before her discharge she could use them both freely. Before the introduction of the operation of exsection, this arm would have been amputated, probably above the elbow.

Case 2d. Resection of two-thirds of inferior maxilla.—In July, 1850, I was asked to see Mary, a negro woman, aged about 35 years. She gives the following history of her case. About twelve months ago, while in New Orleans, she had the first molar tooth of the left side of the lower jaw extracted: she states that in the operation a portion of the alveolar process was broken off, and that from that time she has suffered constant pain and swelling in that side of the face, with occasional discharge of small pieces of bone.

When I saw her, the left side of the face was much swollen, and the whole region of the left side of the inferior maxillary bone the seat of much induration; there was a fistulous orifice externally along the lower margin of the bone, about half way between the angle and the symphysis, which communicated with the diseased bone, and another orifice which opened internally on the gum, whence the molar tooth had been extracted, which also communicated with the denuded bone and with the other sinus.

On the 12th of July, hoping to be able, by a simple operation, to remove the whole cause of the trouble, I made an incision over the seat of the disease, and finding that a large portion of the thickness of the bone was involved, took out an entire section, of a V shape; after the external wound resulting from this operation was entirely healed, as it was in three weeks, there still remained a fistulous orifice in the mouth, which was found to communicate with denuded bone; from this orifice several pieces of necrosed bone, were from time to time extracted, without, however, affording any permanent relief to the patient, whose face continued much swollen and very painful. In a few days, an external orifice again made its appearance, from which a considerable quantity of pus was discharged daily, and which was found also to communicate with denuded bone.

Upon a careful examination of the case now, it was ascertained that the whole left side of the body of the bone was in a state of hypertrophy, the disease extending across the symphysis to a point between the right lateral incisor and the canine tooth of the same side in one direction, and to the angle of the bone in the other.

Upon consultation with my friends, Drs. Marx and Gibson, it was determined that the safety of the patient depended upon the entire removal of the disease, and that to effect this with greater certainty, it would be better to disarticulate the bone at the temporo-maxillary articulation, and to resect the body just to the right of the diseased portion.

Accordingly, on the 2nd of September, I proceeded to do the operation as follows:—The patient being placed in a suitable chair, and put thoroughly under the influence of chloroform, an

incision was made commencing opposite the left tempero-maxillary joint, passing downwards along the ramus, a few lines below the angle, thence, slightly curved with the convexity downwards, horizontally along the inferior edge of the body of the bone, to the right side of the chin, and thence upwards to the right angle of the lip. The dissection was then made from below upwards, so as to penetrate the cavity of the mouth, and to expose the whole of the anterior face of the diseased mass. A slight dissection and the use of the fingers enabled me to detach the soft parts from the posterior face of the bone along the portion at which the section was to be made. This accomplished, the first incision was extended through the lower lip,* the flap turned back and held by an assistant, the chain saw passed behind the bone just anterior to the first bicuspid tooth, and the bone rapidly divided at that point. The internal attachments of the bone were then speedily divided, and the operation completed by the division of the attachment of the temporal muscle to the coronoid process and the disarticulation at the glenoid cavity. This stage of the operation was greatly facilitated by using the bone itself as a lever, to put upon the stretch the parts to be divided and to pry out the coronoid process from under the zygoma.

No vessel required ligaturing. The edges of the coronoid were brought together with sutures and adhesive strips, a light dressing applied and the patient put to bed, after the administration of a stimulant, in a tolerably comfortable condition.

During the operation, a thread was passed through the arteries of the frenum of the tongue, in case retraction should take place; but although the bone was divided some distance to the right of the symphysis, and consequently the anterior portion of the genio-hyo-glossus muscle necessarily divided, no retraction of the tongue took place, and no symptoms of suffocation occurred.

Upon an examination of the bone after the removal, it was found in a state of hypertrophy, the cancellated portion and the

*Anxious to preserve the integrity of the lower lip, if possible, I attempted to pass the saw without dividing it, but found that the extreme thickness of the bone and the small curve of the needle used, rendered it impossible. I was obliged, therefore, to divide the lip in order to obtain more space for manipulation.

dental canal in the left side being filled up with dense compact laminated bone structure. Though but seven weeks since the first operation, the space left by the removal of the section of bone at that time had become firmly filled with cartilaginous tissue.

The patient did well and on the 17th September, just two weeks after the operation, the wound was completely healed. There remained, however, partial paralysis of the left side of the face owing to the section of the portio-dura, and a good deal of swelling, with some eversion of the lower lip. The condition of the lip was entirely relieved in the course of a few weeks longer by the use of adhesive strips, and the paralysis gradually diminished, though it has not entirely disappeared.

Case 3rd. Resection of the ununited ends of a fractured Femur.—The history of this case having been already published in the Stethoscope for May, I will merely describe the operation and its result.

The patient, an athletic Irishman, 19 years of age, had suffered just three months and ten days before, a very oblique fracture in the upper third of the right thigh, in a direction from above downwards and forwards; the fragments were consequently, at the time of the operation, very far separated from each other, the lower fragments being drawn upwards and inwards.

Having placed the patient fully under the influence of chloroform, the operation was commenced by an incision extending from the trochanter major to the outer surface of the external condyle. This incision extended down to the fascia lata, which was then divided continuously with the first incision. In order now to reach the lower end of the upper fragment of the fractured bone, which was drawn forwards and outwards, the vastus externus was separated from its attachments to the rectus femoris, and held back by an assistant. With some little difficulty the extremity sought for was found, a chain saw passed around it about an inch from its termination, the section readily made, and the fragment separated from its ligamentous attachments and removed.

The next step in the proceeding, in the section of the upper extremity of the lower fragment, proved very difficult, in conse-

quence of the great retraction of this portion of the fractured bone. This lower fragment was found drawn up to the lower portion of the gluteal region, and carried by the adductors very considerably inwards, rendering its access by an external incision very difficult. Finding it impossible to reach the upper portion of this fragment through the separation already made between the vastus and the rectus, the vastus was separated from its posterior attachments and turned forward. After a tedious dissection, in which the handle of the scalpel and the fingers were used very much to the exclusion of any cutting instrument, in order to avoid the risk of dangerous hemorrhage, the extremity of the bone was at length reached, and with some difficulty, owing to its very great depth, the chain saw passed around it. This portion of the operation was much facilitated by carrying the foot across the opposite instep, so as to force the fragment sought nearer to the external surface of the thigh. The chain saw turned down both in front and behind, by the thick muscles of the thigh, was worked with difficulty, and, before the section was completed, broke. A good metacarpal saw which was at hand, was substituted, and with it the section finished. The detached portion about an inch and a half in length, was then easily removed. The two opposite ends of the bone, thus rendered perfectly transverse, could then be brought accurately into contact, producing a shortening of the limb of about two and a half inches.

The next step in the operation consisted in boring with a small bit and brace, a hole in each of the ends of the bone thus approximated, through which a very strong silk ligature was passed by means of an eye-probe and finally tied. The holes were bored obliquely, commencing each about half an inch from the sawn extremity, and passing the one upwards and the other downwards, terminated in the medullary canal. The ends of the ligature were brought out of the wound. The edges of the wound were then brought together as accurately as possible, the limb lightly bandaged, a long splint applied along the whole posterior surface of the limb, and the patient put to bed, with the leg resting upon a slightly inclined plane.

During the operation, a good deal of blood was lost, a large portion of which was venous; and after its completion, the patient

who had then recovered from the effect of the anæsthetic agent, was very pallid and excessively prostrated. Brandy and water was freely administered, and warm clothing applied. Reaction took place very slowly; about four hours after the operation, the pulse began to rise and the skin to regain its warmth. The stimulants were then used more moderately. The reaction, however, was never complete, and only lasted a few hours. During the night the pulse again began to flag, and the patient became more restless; stimulants were again resorted to and used very freely, but with no effect. The system seemed to have lost its power of responding to any agent, and in spite of the most active stimulant treatment, the patient continued gradually to sink, until about 6 o'clock the next evening, just thirty hours after the operation, he died.

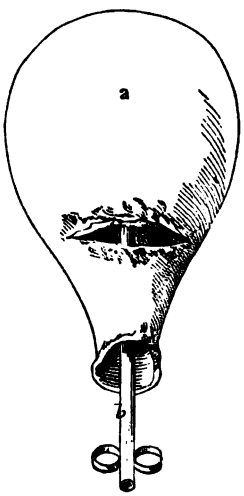
No post-mortem examination could be obtained.

Cure of a Vesico-Vaginal Fistula, by an operation by PROFESSOR PANCOAST. By C. D. MEIGS, M. D.

In the month of October, 1848, a lady was delivered, by mutilation of the fœtus, after a most painful and protracted labor; the child having presented by the shoulder. I am not informed further than this, as to the particulars of the case. After recovering her composure from the greatest fatigue and exhaustion, she found herself always wet, and felt no desire at any time to pass the urine. By slow degrees she regained her health, with the exception that she had constant *stillicidium urinæ*, which occasioned painful inflammation and excoriation of the external privities and inner sides of the thighs; and she was annoyed by the urinous odor, which it was impossible to suppress.

After a length of time, she was informed that the cause of her distress depended upon a laceration affecting the urethra, so nigh to the neck of the bladder as to prevent the *sphincter vesicæ* from controlling the escape of the urine. During many consecutive months, attempts were made, by cauterization with nitrate of silver, to cause the aperture to close—which was in vain.

About six months ago, she came to me for advice in the case, when, together with Prof. Pancoast, I found the circumstances as I shall attempt by means of the figure to explain:



(*a*) Is the bladder of urine seen from its under surface. *b*, *b*, a catheter in the urethra; a part of the catheter is visible in the fissure, (*d*) just below the orifice of the bladder. The excessive resistance of the perineum made it then impossible to get at the fissure with instruments fit to pare off the edges, or with needles to close the gap. It is probable that the highly irritated state of the parts, brought on by the continual flowing of urine over them, may have rendered access to the fissure out of the question. Be that as it may, it was not then deemed possible to operate on the case.

My colleague, Professor Pancoast, finding it too difficult, with various methods of exploration, to bring the injured part within the reach of his instruments, concurred with me in advising her to postpone any definitive attempts to cure by operation until the fall of the year; with a view to her using in the mean time, a certain precaution, by which we hoped to render the case more manageable after the lapse of a few months. The precaution consisted in the use of a tube which I have described

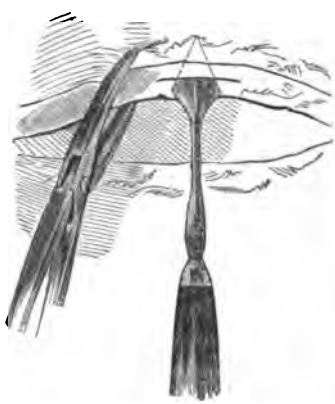
in the Transactions of the Philadelphia College of Physicians, and which I caused to be made for her, and which was shaped as follows, viz: it was a silver gilt canula, 2¼ inches long, of a spindle shape, with a small funnel adapted to one end of the spindle, and a perforated disk to the other end, as in the annexed figure:

I supposed that such a canula, if introduced along the urethra, quite to the bladder, would be prevented from passing wholly into that organ by the small triangular disk or shield, (*a*) that the meatus urinæ would firmly contract on the narrow part of the canula, (*b*) whilst the bulging portion (*c*) would, by distending a less muscular part of the urethra, serve to retain the instrument more surely in situ. I designed that the small cylindrical part of the canula (*d*) should cross the opening as an acqueduct for the urine, while the smallness of its size would enable it at the same time to allow the fissure to close the more readily, *par defaut d'extension*. The funnel (*e*) at the end of the canula, was to pass just within the orifice of the bladder and no farther, in order to collect the urine, which was thus to be conducted out upon sponges placed in front of the outer shield, which was properly adapted to fill up the triangular space of the vestibulum.

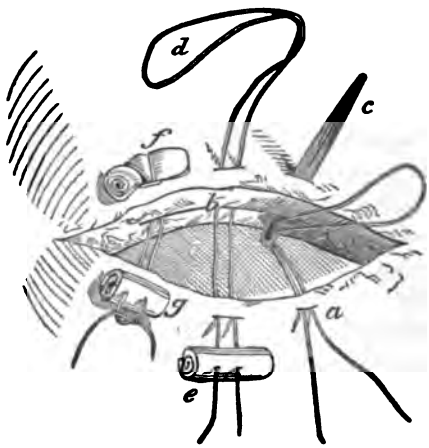
Such an instrument placed in the urethra, would not be thrust forth except the patient should make violent efforts to expel it. We hoped that by thus preventing the continual flow of the urine through the lacerated part, it might tend to close up so much as to render an operation practicable and successful; and I explained to her that such a conductor for the urine, if it could be worn for a long time, would perhaps serve at last as a cure, without resort to operation by the knife. She was begged to persist in the trial for several months—but came back again in about 150 days—being impatient of her sufferings.

We thought great good was effected by the use of the canula, which she used during the greater part of the time, being, however, during her absence from town, annoyed to that degree, as to be sometimes obliged to suspend the use of it—which was reasonably to be expected.

On a re-examination of the fistula in connection with Dr. Pancoast, on 13th of August, we found it much more easily reached with instruments than on the former visit of the patient, and the performance of the operation for its cure was determined on. On the 16th day of August, Dr. P., assisted by Mr. C. Neff, and by myself, the patient being on her knees upon a bed, proceeded to the operation. The callous margin of the fistula was first pared away—the mucous membrane on the right side of the wound was then seized by Dr. P. with a pair of delicate hooked forceps, and detached with scissors curved on the flat, for the space of 5-8ths of an inch around the semicumference of the orifice. The next stage of the operation was to obtain a corresponding surface on the opposite or further side, to overlap that already made. This was gained by Dr. P. in the following mode. The right lip of the orifice was grasped superficially with the forceps, and split mid-way between the two mucous membranes, to the depth of half an inch, with a lance-shaped knife curved on the flat, making, as it were, two layers of the vesico-vaginal septum, for the space of nearly an inch in length and half an inch in depth, as described in the figure:



The lance-shaped knife very readily made a wound by thrusting it into the bladder edgewise, as I have endeavored to show by the representation annexed. It is evident, if the tissues can be firmly held by the hook forceps, as in the diagram, that the lance-shaped knife can very readily be thrust into the edge or lip of the wound, so as to split it as much as could be desired, and that such a wound would be completely fresh.



Let (*a*) be the revived surface of the lower lip of the fissure. Let (*b*) be the split and gaping wound made by means of the lance-shaped knife in the edge of the upper lip of the fissure; (*c*) is a short flat needle, with the eye in the upper part, and armed with a double thread or ligature. It is passing out at the upper part of the split lip, and from thence is to be drawn forth by means of a dressing forceps; (*d*) may represent the same ligature from which the needle has been removed; (*e*) is a piece of adhesive plaster made into a hard roll like bougie, and hammered out flat; with two small holes drilled through it to admit of threading the ligatures through them; (*f*) is the ligature (*d*) adjusted with a loop over a small quill, composed of adhesive plaster rolled into a small cylinder or bougie; (*g*) is the lower quill, (*e*)

Now it is clear that if the lower lip (*a*) can be freshened with with scissors curved on the flat, (a very possible operation,) and

if the upper lip (*b*) can be split or divided by a lance-shaped knife; and if *g* and *f* can, by pushing *g* forwards to *f*, be closely approximated, the opposite surfaces *a* and *b* may be brought into effectual and protracted contact, and thereupon, if adhesive inflammation follows, the patient will be cured.

From the success of the operation above related, I am led to believe, that few of those unfortunate women who would otherwise be doomed to a life of disgusting misery after laceration of the bladder or urethra, need be left in hopeless incurable distress; and it is with a view to communicate to the brethren in Medicine everywhere, the knowledge of this simple and effectual process, that I have drawn up these notes.

I should commit an act of injustice, however, if I should stop here without making an explanation due to a Surgeon, who deserves, and indeed has my highest respect. I speak of Dr. Sims, of Montgomery, Alabama.

In a conversation with him in the end of July, 1851, he informed me of his many successful operations in vesico-vaginal fistula—a success which in my humble opinion entitles him to the praise and gratitude of our whole profession, which is always advanced by the ingenious and rational improvements made by such individuals, and which constitute a real progress of the Art. Dr. Sims communicated to me the fact, that if the patient, laboring under this accident, be placed in a certain position, the injured parts may be readily brought not only in sight, but so exposed as to render them easily accessible to the knife, the scissors, &c., &c.

His own judgment prompted the discovery of this method, which consists in placing the patient on her knees with the ossa femoris standing in a vertical position while the summit of the thorax touches the table or bed on which she is placed.

If such a posture be maintained for a few minutes, the fall of the abdominal and pelvic viscera downwards toward the diaphragm, allows the os externum to relax, to open, and at last to offer so wide an aperture, that the cervix uteri may be clearly seen as in a metroscope. In the meantime, the fall of the viscera continuing, the walls of the vagina, to avoid the tendency to vacuum caused by the retreat of the pelvic contents toward the diaphragm, tend to expand, and like a balloon leave a spherical or orbicular

cavity, as if the vagina was filled with a child's head, whereas it is filled with air.

This discovery is in the highest degree applicable to the uses of curative surgery in vesico-vagina fistula.

The great experience and success of Dr. Sims will enable him, it is hoped, soon to give his results to the profession. In the meantime, I trust I shall give no offence while in describing the several steps of the operation on my patient, if I take this early occasion to thank Dr. Sims for his information, and to acknowledge how much I am his debtor therefor.

From the moment of completing the operation above described, not a drop of urine escaped through the fissure. She wore the spindle-shaped canula during the ten or twelve days following and then removed it. The ligatures were easily cut away and picked out with dressing forceps, and we had the happiness to see the patient completely relieved of the effects of an accident, which nothing but a religious resignation could have enabled her to bear with patience, or to regard life otherwise than as a distressing burthen, to be borne only because it was God's will that she should patiently endure its weight. The cure was rapid and complete.

BIBLIOGRAPHICAL NOTICES.

A Practical Treatise on the Diseases and Injuries of the Urinary Bladder, the Prostate Gland and Urethra. By S. D. Gross, M. D., Professor of Surgery in the University of Louisville, &c. pp. 726.

The late Dr. Parrish used to remark, that the "Cream of Surgery" was contained in the pelvis; and those who had the benefit of his wise instructions, will ever remember how his intelligent and benevolent face brightened up when he reached that part of his Surgical course relating to Hernia and Diseases of the Urinary Organs. With what interest he invested the subject, as he carried his hearers along with him, through the various difficulties which would meet them in the management of this class of cases, and as he recounted the triumphs of surgery in overcoming them.

There is, perhaps, no branch of Surgery, where the skill of the surgeon is more severely tested, and which should be more closely studied by every one who presumes to minister to the relief of surgical maladies.

Hence it is, that we hail the appearance of Dr. Gross' work with peculiar pleasure, as containing a thorough and systematic exposition of this class of diseases, arranged with great care and judgment, and written in a style of clearness and precision which must commend it to general acceptance.

The first five chapters are occupied with a lucid anatomical description of the urinary apparatus illustrated by a series of well executed wood cuts, with an account of the properties of urine, in its healthy and diseased conditions.

The diseases of the bladder are next treated of, including acute cystitis, fibrinous exudation of the bladder, suppuration and abscess, gangrene and ulceration.

The infrequency of acute inflammation of the bladder, is thus remarked upon by Dr. Gross:

"In the course of an extensive practice during the last twenty years, comparatively few cases of this complaint have fallen under my observation, nor has this organ, in the numerous dissections which I have made

within that period, exhibited, except in a few instances, evidences of this affection. Dr. Louis, of Paris, examined the mucous membrane of the bladder in five hundred subjects, dead of various diseases, without discovering any serious lesion in any of them. In six there was simple redness or injection of the vessels, but no change of structure; in a few only, was there any softening and organic derangement. Similar testimony in regard to the infrequency of acute inflammation of the bladder is borne, by Brodie, Hope, Begin, Coulson, and other writers on the diseases of the urinary apparatus."

As an idiopathic affection, there can be no question of the great rarity of cystitis, while as a symptom of other diseases of the urinary organs, it often occurs.

Thus we see all the evidences of high irritation and inflammation of the mucous coat, in the mechanical obstructions of the urethra which impede the passage of urine, in the extension of gonorrhœal inflammation from the urethra to the bladder, in strangury, &c., requiring treatment adapted to the circumstances of each case. The remedies recommended for cystitis in its several forms and stages are fully detailed, and appear to be well chosen and judicious. The following remarks on the use of anodyne injections in this affection, are applicable to a large class of cases, not included under this head, and are well worthy of attention.

"Of all the local remedies none hold a higher rank in the treatment of this affection than anodynes, administered by the rectum, either in the form of *injections* or in that of suppositories. They not only allay pain and spasm, but they quiet the bladder, and render it more able to bear the presence of the urine, a desire to pass which is the principal cause of the patient's suffering. The best form of injection is from half a drachm to a drachm and a half of laudanum to two ounces of tepid water, thrown up with a good pewter syringe, with a long nozzle, which is far preferable to all the patent contrivances of the kind of which I have any knowledge. The bowel should be previously cleared out with a purgative, or an enema, and care should be taken not to force the fluid against the anterior wall of the rectum. The quantity of laudanum here specified is a dose for an adult; for a younger subject, or a person enfeebled by age and disease, a smaller quantity will suffice. The repetition of the medicine must be regulated by circumstances; if it pass off soon after it is administered, it should be immediately renewed; and the same rule should be enforced, if it is retained, if it does not answer the desired end in two or three hours. Where laudanum is inadmissible, on account of idiosyncrasy, black drop, or morphia, may be employed as a substitute."

The other sections of this chapter are occupied with the consideration of fibrinous exudation of the bladder, suppuration and

abscess, gangrene and ulceration. But these morbid conditions are so rare, as scarcely to demand notice, except in connection with other diseases of the organ of which they form one of the stages.

Under the head of "Chronic lesions of the bladder," we have a chapter on Catarrh of the bladder, or Cystorrhœa. Under this term Dr. Gross includes all those affections of the mucous coat attended by an inordinate mucous secretion, whether arising from stricture of the urethra, the presence of calculus, hypertrophy and enlargement of the prostate gland, &c.

Regarded in this light, cystorrhœa is nothing more than a symptom of a more serious malady, and would scarcely seem to be entitled to consideration as a distinct disease.

Thus Dr. Gross remarks:

"Cystorrhœa is always dependent, directly, or indirectly, upon some obstacle to the evacuation of the urine, or upon a diseased condition of the bladder itself. Hence the most common exciting causes are stricture of the urethra, the presence of a calculus, hypertrophy, and enlargement of the prostate gland. In fact, there are few protracted cases of this kind in which this affection is not witnessed to a greater or less extent, or of which it does not constitute in the end a prominent symptom. Nearly all the very worst forms of vesical catarrh I have ever seen have been of this description. Paralysis of the bladder, whether produced by over-distension of the organ by urine, or injury or disease of the spine, frequently gives rise to this state. The muscular fibres having lost their expulsive power, the water is never completely evacuated at any one time even when the catheter is used, but a portion remains in the bottom of the bladder, where it is speedily decomposed, and thus acts as an irritant to the lining membrane, followed by an inordinate secretion of mucus. Cystorrhœa is a constant attendant upon sacculation, ulceration, hypertrophy, and carcinoma of the bladder."

Now we do not consider the increased and altered mucous secretion, dependent upon mechanical obstruction to the passage of urine, or to the presence of stone, as constituting catarrh of the bladder, strictly speaking, nor can we admit the propriety of so considering it.

In the treatment of cystorrhœa Dr. Gross fully recognizes the distinction between the idiopathic affection, and that which is merely symptomatic. In the latter form, the nature of the exciting cause must be ascertained, while the former must be roached by antiphlogistics, balsams, terebinthinates, &c. The merits of the several remedies recommended by authors in this form of

disease, are briefly discussed, and much valuable practical information conveyed to the readar. Dr. Gross himself places a high estimate upon antiphlogistics.

"It would be useless to repeat here what has been already said, in other portions of this treatise, respecting the employment of antiphlogistics. The propriety of these measures is self-evident. They are imperatively demanded in all cases attended with violent pain and frequent micturition, even when there is no marked constitutional disturbance. The abstraction, under such circumstances, of fifteen or twenty ounces of blood from the arm, will often do more good in breaking up the disease than any other remedies that we possess. Where the lancet is inadmissible, twenty or thirty leeches may be applied to the perinæum and inside of the thighs, or to the lower part of the hypogastric region."

We must dissent from this indiscriminate recommendation of the lancet in a disease almost confined to aged persons, and often connected with an enfeebled state of the system. The abstraction of fifteen or twenty ounces of blood from an old man who has "violent pain and frequent micturition, even when there is no marked constitutional disturbance," would appear to us injudicious, especially as we have often seen these symptoms promptly yield to emollients, anodynes, warm bathing, &c.

A peculiar form of hypertrophy chiefly affecting the neck of the bladder, and generally found in old subjects, is next described under the name of "bar like ridge of the neck of the bladder," with a wood cut, affording a beautiful illustration of this disease, from a specimen in the cabinet of Dr. Sabine of New York. This affection is generally connected with enlarged prostate, and like it, does not admit of cure.

The chapter devoted to nervous affections of the bladder, is one of the most interesting and instructive portions of the work. Irritability and neuralgia of the bladder are accurately described, and the various points of diagnosis between them and organic lesions of the organ are pointed out. Dr. Gross' remarks upon the causes of this irritability, and upon the means of cure adapted to particular cases, convey a large amount of valuable instruction upon a subject which has received but little attention from medical writers; we regret that our limits will not admit of making extracts, but we must forbear.

Paralysis of the bladder, from external violence, from over disension, from want of power in the general system, constitutional

irritation after operations, from low fevers, &c., are treated of under appropriate heads. The following directions on the use of the catheter in these cases, are sound and judicious, and worthy to be borne in constant rememberance by the practitioner.

"Two important indications are presented in every case of this disease; first, to draw off the urine, and secondly, to restore the tone of the muscular fibres of the affected organ. To fulfil the first, all that is necessary is to use the *catheter*. This should be done at stated intervals, to prevent undue accumulation, and to compel the viscus to return, as it were, to its original habits. Carefully persevered in, this practice is frequently of itself sufficient, in a short time, to cure the malady. In confirmed cases, the instrument should be employed once about every four hours, especially if there be much renal secretion; in opposite states, on the contrary, three or four times a day will be often enough. I generally prefer introducing the catheter every time it is necessary to draw off the urine to letting it remain in the bladder permanently; and as there is seldom any difficulty in doing this, the patient usually soon learns to perform the operation himself. Sometimes, however, the improvement is more rapid and decided when the catheter is constantly retained, and the water permitted to flow off every hour or two. I have found this practice particularly useful in cases of paralysis, attended with pain and spasm of the neck of the bladder, and a frequent desire to urinate. When the accumulation is very great, and has continued for several days, it is a good rule not to evacuate all the water at once, for fear of inducing severe depression from the sudden removal of the stimulus of distension. I have seen several cases in which I am satisfied the patients lost their lives from inattention to this precaution. My own practice, under such circumstances, is not only to allow a small quantity of urine to remain, but to support the weakened organ by swathing the abdomen, precisely as after parturition, and tapping in ascites. When the catheter is permanently left in the bladder, it should be confined in the usual manner, and cleaned every other day; otherwise it will be certain to become encrusted with inspissated mucus, if not with earthy matter, and thus produce an injurious impression upon the affected organ.

Much harm is often done in this disease by the protracted employment of the catheter. The proper plan is always to discontinue it as soon as it is discovered that the organ has regained its expulsive power. The patient should be requested from time to time to try to evacuate the bladder by his own efforts, and if he is not able to effect the object completely, he should be assisted with the catheter; for the rule is, in all cases, to draw off every particle of water at least twice in the twenty-four hours. By employing the instrument too long, the organ becomes habituated to its use, and a much longer time will necessarily elapse before a cure takes place."

Chapters VI and VII are ocupied with a description of schirrous, encephaloid and tubercular diseases of the bladder, with other

non-malignant growths; all of which rarely occur in practice, but which must have a place in a systematic treatise on the surgery of this part of the body.

Chapter VIII is a curious essay on worms in the bladder, a few cases of which have been reported by medical writers. Serous cysts and hydatids, fœtal remains in the bladder, hair and air in the bladder, are each considered, though they possess but little practical interest.

An interesting chapter is devoted to vesical hemorrhage, both idiopathic and traumatic. Considering the frequency of this accident from unsuccessful and awkward attempts to introduce the catheter, or from well directed efforts in diseased conditions of the neck of the bladder and prostate gland, we were surprised to find so little notice of it in this connection. There are fewer cases presenting greater difficulties, in the introduction of the catheter, and the evacuation of the bladder, than these, and it would seem desirable in a work like the present, to have laid down the principles upon which they should be treated more in detail.

The following extract conveys the author's views on this point:

"In general, the blood which is poured out in vesical hemorrhagcis dissolved by the urine, and thrown off by the natural channel. In some instances, however, especially when the secretion of urine is deficient, or the quantity of blood disproportionably large, the accumulated fluid coagulates and distends the bladder, which forms a hard, firm tumor above the pubes, and leads to complete retention of urine, attended by the most urgent and distressing symptoms. To free the organ of its contents, under such circumstances, is often no easy task. The more simple means are of course resorted to first. With a silver catheter, introduced along the urethra, an attempt is made to break up the coagulated mass, and then to dissolve the pieces by the injection of tepid water and acetic acid, in the proportion of one ounce of the latter to five ounces of the former. Vinegar is a powerful solvent of blood, and is far better than water alone. The injections should be conducted with great care, and should be repeated two or three times in the twenty-four hours. Some of the smaller coagula may sometimes be removed by a syringe applied to the catheter, though such a procedure is, in general, quite inefficient."

Retention of urine, catheterism, and puncture of the bladder, are treated of in chapter XIV. Dr. Gross prefers the silver to the gum elastic catheter in all cases of retention from hypertrophy of the prostate gland. On this point he remarks:

"The treatment is by the catheter; and one of silver is far preferable

to one of gum elastic. It must be large in the curve, and at least two inches longer than in ordinary cases, otherwise it will fail to reach the distended reservoir. The instrument passes on without difficulty until it comes in contact with the enlarged gland, when its progress is arrested. Instead of forcing it onward, the surgeon introduces the left index finger, well oiled, into the rectum, and placing it against the instrument, he guides its beak into the bladder, by pushing it gently towards one side or upwards towards the pubes, at the same time that he urges the handle on with the right hand. By this manœuvre the obstacle is usually overcome without much trouble, however great the enlargement of the prostate. To empty the bladder completely it is necessary, as the point of the catheter cannot reach the cavity behind the gland, to raise the patient's hips, so as to force the urine out of its hiding-place."

Although there can be no question of the advantages of the silver catheter in cases of difficult obstruction, yet it must be confessed that there are a multitude of cases where the gum elastic instrument is preferable. As for instance: in that large class where the daily use of the instrument for a lengthened period becomes necessary in ordinary cases of retention without obstruction, or in those in which obstruction has been overcome by the previous use of a silver instrument.

We presume Dr. Gross would favor the use of the gum elastic catheter in these cases, and yet we find no mention of it in his remarks on the subject; thus conveying the impression that the silver catheter should be mainly relied on in practice, a recommendation which we consider far too indiscriminate.

Under the head of "puncture of the bladder," Dr. Gross discusses the circumstances under which it may become necessary to reach the bladder, either by the rectum, perineum, or above the pubis; and each of these operations is described. The necessity for their performance, however, is extremely rare, and some surgeons have even doubted the propriety of it under any circumstances.

In the chapter on Incontinence of Urine, we find the following practical hints on the management of this troublesome affection occurring in children:

"In that variety of the affection which is met with in boys and girls, the cure may be greatly expedited by proper attention to the diet, which should always be bland and unirritant. Late suppers are avoided, and the patient must abstain entirely from drinks for several hours before going to bed. During the night he is to be waked two or three times for the purpose of emptying his bladder, and this practice is to be per-

sisted in for weeks, and even months, until the disagreeable habit is broken up. During all this time, as well as, indeed, for a long period afterwards, the child should lie upon his side, to prevent the urine from coming in contact with, and irritating the neck of the bladder. The internal remedies from which I have derived most benefit in the treatment of this affection, are strychnine and cantharides, given three times a day, in the proportion of the twelfth or sixteenth of a grain of the former to the eighth or tenth of a grain of the latter, according to the age of the subject. A minute portion of opium forms a valuable addition: and, in atonic cases, I often combine with these articles some of the preparations of iron. When the strychnine disagrees, or fails to answer the purpose, we may substitute the extract of nux vomica. In either case, it is important to watch the effects of the remedy. I have great confidence in the use of cantharides in this affection, and have known it to afford relief when everything else seemed to prove unavailing. I prefer the powder to the tincture, and occasionally continue the exhibition of it until slight strangury is induced."

Our author does not seem to have been aware of the valuable paper of the late Dr. Otto, of Philadelphia, on this subject, published in the *North American Medical and Surgical Journal*, in 1830. The treatment introduced by Dr. Otto, and since successfully practised in this city, consists of the free use of uva ursi tea, and the muriated tincture of iron, with cold dash, blister to the sacrum, &c.

Chapter XVII enters into an elaborate examination of the subject of urinary deposits, their origin, chemical constitution, and the modes of medical treatment adapted to the several varieties. And chapter XVIII treats at large of "Stone in the Bladder, its nature and causes, symptoms, and the different methods of operating for its relief." This chapter occupies 173 pages, and is a full exposition of the subject, bringing before the reader the latest improvements in the several operations for stone, and comparing with judgment their relative merits.

Our space will not permit us to follow the author through this interesting portion of his work, but we can recommend its careful perusal and study, especially to the younger members of the profession who wish to be thoroughly acquainted with this important branch of surgery.

The Diseases and Injuries of the Prostate Gland form Part II. of the volume.

These affections are considered in their proper order, and are illustrated by a series of handsome wood-cuts. We regret that

we must also pass over the many interesting points embraced in this part of the work, for although our author has not been able to bring forward anything new in the treatment of these diseases, yet he has presented the existing state of knowledge on the subject, in a clear and perspicuous manner.

Part III treats of the "Diseases and Injuries of the Urethra," including rupture or laceration, stricture, tumors of the urethra, neuralgia of the urethra, foreign bodies in the urethra, infiltration of urine, fistula, false passages, &c. &c., covering 116 pages.

A large amount of practical matter of great interest is here brought together, but we are prevented from even presenting a glimpse of it to our readers.

We can cordially recommend the volume of Dr. Gross both to the practitioner and student, as an excellent systematic treatise on a class of diseases both common and important. It is highly creditable to him, and no less so to our national medical literature, yet struggling for an existence, but destined in no distant day to form an important part in the great republic of medical letters.

Southern Medical Reports. Edited by E. D. FENNER, M. D., of New Orleans. Vol. I. 1851.

We regret that the late period at which we received this interesting volume, has prevented our giving it that extended notice which its merits demand. At some future time, not far distant we trust, we will lay before our readers a digest of its contents. In the mean time we bespeak for it the earnest attention of the profession in the North as well as in the South, as containing matter that will amply repay persual.

Special Anatomy and Histology. By WILLIAM E. HORNER, M. D., Professor of Anatomy in the University of Pennsylvania, Senior Surgeon to the St. Joseph's Hospital, &c. *Eighth edition, Illustrated with anatomical figures. In two volumes.* Philada. Blanchard & Lea. 1851.

A new edition of this popular and standard treatise on Anatomy having been called for, the author has incorporated into it

such improvements as the advancing condition of the science required. The text has been, in many places, modified in accordance with existing views, and a number of new illustrations added to it. Upon a work so extensively known, and so generally acceptable, it would be useless to comment; it has already received the most convincing proof of its popularity and usefulness in its rapid sale. Having announced to our readers, therefore, this new issue, we commend it to all as one of the best books on the subject in the English language.

The Laws of Health, in relation to Mind and Body. By LIONEL JOHN BEALE, M. R. C. S. Philadelphia, Lea & Blanchard, 1851. pp. 295.

This is a sensible and agreeably written work on a somewhat hackneyed subject. We feel, however, altogether disposed to admit the force of the author's plea, that, "although there are many works on health addressed to the public, yet it cannot be said that their influence has been sufficient to supersede the necessity of another, while such manifold evidence continues of the desolations which afflict mankind from ignorance of the laws of health."

Books like this are certainly of the best tendency, and offer the most effectual antidote to the spread of quackery and charlatanism. We can recommend Mr. Beale's little volume as especially deserving of professional countenance and support. It contains a very clear resumé of the leading facts of physiology, with an excellent manual of dietetic and hygienic recommendations; and, although, perhaps, a little overloaded with metaphysical discussion, presents much that is truly admirable in the connection between intellectual and moral improvement and the maintenance of health.

We ask the attention of our readers to the following remarks on empiricism and false theories of medicine:

"Among the diseases to which the human frame is liable, of course many are incurable; and it is on the fears of persons thus afflicted that the inventors of novel modes of treatment, the proprietors of nostrums, and pretenders of all sorts, make their harvest. The art of medicine is partly empirical; many of the remedies we use have been discovered to be so by accident or experience: hence the opinion, that there may be

secret modes of cure, for particular diseases, in possession of persons who have never studied medicine. Upon this possibility, there has ever been a field for the owners of nostrums, the curers of disease by miracles, the projectors of new methods of treatment, as Homœopathy and Mesmerism, or the universal application of an old one, as Hydropathy.

As long as the world lasts there will be nostrums; every family remedy is one; and who can say that an old lady, who may have put together several simples, and formed a useful remedy for a cough, shall be prevented by law from giving or selling her medicine? Medical reformers argue, that all medical treatment should be confined to those who have proved their qualifications by proper tests; but the public will never admit of such an attack on liberty: nor would it be just, if it could be accomplished, for some very useful medicines have been nostrums, as James's powder. Until we can make medicine an inductive science, we have no right to ask for the exclusive privilege of medical treatment. The true method of putting down pretenders in medicine, as in every thing else, is to enlighten the public mind—it is ignorance which affords patronage to secret remedies, miraculous cures, and quackeries of all sorts, both in and out of the domain of physic. When all medical practitioners shall cease to be pretenders to more knowledge than they really possess, then will the public cease to patronize quackery;—and a more complete education—intellectual, moral and professional—of all classes of medical practitioners, engendering higher views of their duties, will cause them to rank higher in the estimation of the public, and be productive of greater benefit, than any exclusive privileges which the Legislature could confer upon them."

Dispensatory of the United States of America. By GEORGE B. WOOD, M. D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania, &c. &c., and FRANKLIN BACHE, M. D., Professor of Chemistry in Jefferson Medical College of Philadelphia, &c. &c. *Ninth Edition, carefully revised.* Philadelphia: Lippincott, Grambo & Co., 1851. pp. 1456.

The ninth edition of the U. S. Dispensatory, just issued, has closely followed the publication of the last, which appeared only two years since. This has, however, been rendered necessary, not only by the great accumulation of valuable additions to the Materia Medica during the period in question, but also by the recent publication of the decennial editions of the United States and British Pharmacopœias. The new edition of the Dispensatory is enlarged between sixty and seventy pages beyond the limits of the last. It is, perhaps, superfluous for us to say that it fully keeps pace with the progress of the Materia Medica and

Pharmacy; and, in view of the very great mass of new materials which the authors have had to deal with, they have indeed been particularly successful in performing the difficult task of selection and condensation. The "ninth edition" in every way maintains the reputation of the Dispensatory as a standard national work.

The Geological Observer. By Sir HENRY T. DE LA BÊCHE, C. B., F. R. S., &c., Director General of the Geological Survey of the United Kingdom. Philadelphia. Blanchard & Lea, 1851. 8vo. pp. 695.

We have great pleasure in bringing to the notice of our readers the very handsome reprint of Sir H. De La Bêche's excellent work on Geology, with which we have been favored by the publishers, Messrs. Blanchard & Lea. It is one of the best elementary works on the subject, in the language.

A New Sign Language for Deaf Mutes. By ALBERT J. MYER, Buffalo, 1851.

This pamphlet is a *thesis* for the degree of Doctor in Medicine, presented before the medical department of the University of Buffalo, and published in accordance with a vote of the faculty. The author, who appears to have been formerly connected with a telegraph office, recommends the employment of Bain's alphabet as a new sign language (meaning of course a new alphabet) for deaf mutes. According to his suggestion, the finger is made to write upon a table, or "the hand of a companion or any portion of his body," it being understood "that whenever the finger rests upon the table, it is supposed to be drawing a line." Dots and lines are the symbols used in Bain's alphabet, and "to form a *dot*, the hand is brought in contact with the table or other object, and instantly returned to the standard position. To form a *line*, it is brought down similarly, retained for a longer period in contact, and in like manner returned to place."

This is undoubtedly a practicable alphabet for deaf mutes. But it is more complicated, more difficult to acquire, and more open to mistakes in practice, than the ordinary alphabet with

the fingers, which has moreover the advantage of being arranged to resemble the letters of the printed and written alphabet.

A Historical Sketch of Surgery, being an Introductory Lecture to a course on Surgery, in Geneva Medical College, N. Y. By JAMES BRYAN, M. D.

This is a very pleasantly written sketch of the history of surgery, "from the revival of literature, to the end of the seventeenth century."

THE MEDICAL EXAMINER.

PHILADELPHIA, OCTOBER, 1851.

MEDICAL NEWS.

BRITISH PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.—The Nineteenth Anniversary of this Association was held at Brighton, Wednesday, 13th of August last; Dr. Jenks in the chair.

CONTEMPLATED ORGANIZATION OF THE PROFESSION IN KENTUCKY. A representation of the Physicians of KENTUCKY, is to assemble in convention at Frankfort in that state, on the 1st of October, with a view to the organization of a State Medical Society.

DR. HENDERSON AND THE UNIVERSITY OF EDINBURGH.—The Faculty of Medicine of the University of Edinburgh, is endeavoring to eject Dr. Henderson, Professor of General Pathology, from his chair, on the ground of his being an avowed homœopathist. The Senatus Academicus, consisting of the professors of all the faculties, refuses to sustain the Medical Faculty, and there the matter rests for the present, "with the possibility that the Medical Faculty may appeal directly to the Town Council."

LYING-IN HOSPITAL OF THE FACULTY, AT PARIS.—A change has lately been introduced at this hospital in the arrangements regarding new-born children. It had been observed that a great many lying-in women being assembled, *with their infants*, in one ward, the cries of the latter interfered materially with the rest of all the patients; it therefore occurred to the head midwife of the establishment to place all the infants away from their mothers, into a separate ward, where the little creatures are kept very cleanly, and have at once whatever medical assistance they may require.

There can be no doubt that rest is extremely advantageous to lying-in women, and that the atmosphere of a ward with so many mothers and infants must be prejudicial to the latter; but it may be questioned whether the frequent conveyance of sucklings to their mothers, both night and day, from one ward to another, is a circumstance free from risk to the infants. It seems, after all, much simpler to multiply the wards, and have them smaller, than part mother and child in the manner described.—*London Lancet, Sept. 6th.*

CUTANEOUS AND MUSCULAR GALVANISM IN PARIS.—Dr. Duchenne, (of Boulogne,) supported by most of the leading physicians of Paris, has lately introduced a peculiar mode of therapeutically using electricity. He calls it localized electrization, and it is principally to the skin and muscles that he applies, either by contact or induction, the currents produced by his peculiarly constructed instruments. Among the affections under the control of Dr. Duchenne's electrization, are sciatica, muscular rheumatism, hyperæsthesia, anæsthesia, &c., &c. He likewise stimulates directly the nervous expansions of internal organs, in cases of paralysis of such canals: as the rectum and its muscles; the bladder (for which a staff ending in a knob is passed into the rectum, and a catheter isolated with India-rubber, except where it is to come into contact with the muscular fibres, is introduced into the bladder;) the uterus (for which cavity a peculiar instrument is used;) the pharynx and œsophagus; the larynx; and by the instrumentality of the pneumo-gastric nerve, the stomach, liver, lungs, and heart.

The inventor uses his peculiar method for the excitation of the organs of sense, and the genito-urinary apparatus. One of the most striking innovations of Dr. Duchenne is the clever manner in which he succeeds in exciting single muscles, this faculty being of vast importance in the treatment of partial paralysis. We had ourselves an opportunity of seeing the manner in which Dr. Duchenne causes the contraction of any given muscle, at a demonstration lately given by him in London, at the

house of Dr. H. Bennnett, in the presence of several distinguished members of the profession. The experiments were made upon the face and arm of a groom, who volunteered his services; and by a peculiar mode of adapting the electricity by induction, and the pole with which the muscles were singled out, the inventor was able to foretel what kind of contraction of the arm or grimace in the face would be made. Our readers will find in the *Archives de Médecine*, vol. xxii. p. 263, and the February and March numbers, 1851, satisfactory details on this new method, of which our description will only give a faint idea.

We should not omit to state that Dr. Duchenne closes a paper (*Archives*, May, 1851) on the subject by these words: "As it will be useful to create a word which should exactly point out electricity by induction, as well as its application, may it not be allowable to use the name of the philosopher who has discovered this kind of electricity? Thus, in the same way as 'Galvani' has given his name to the electricity by contact, so can we likewise give to the electricity by induction the name of Faraday. This electricity would then be called 'Faradism,' and its application 'Faradization.' Such names would establish a clear distinction between the electricity by contact and that by induction, whilst they, at the same time, render due honor to a philosopher to whom medical science owes a discovery far more valuable in a therapeutical point of view than that of Galvani."—*Ibid, Sept. 8th.*

CLAIROVOYANCE IN THE SEVENTEENTH CENTURY.—"*April 11th.* 1681.—Honoured Sir,—I did receive your last letter, dated the 9th of this month, with much grief, haveing an account of your painfull feaver: I pray God it will not vex your body too much; and if by chance it should vex you longer, there is here a man that can cure it with sympathetical power; if you please to send me down the pearinghs of the nailes of both your hands and your foots, and three locks of hair of the top of your crown, I hope, with the grace of God, it will cure you. As for the compositions of them two masters, in my judgement, though weak, I like better Baptist's work than Pedro's, because Baptist work masterly, as you shall perceive, betwixt their bases. All Baptist's bases are singable where many of Pedro's are not so. Herewith my humble respects remaine, Honoured Sir, your most faithfull Servt., CESARE MORELLI." —*Diary of Sam. Pepys, Third Edition, by Lord Braybrooke*, 1851, vol. v. p. 308. [He, (Cesare Morelli) appears to have been a music-master. Many of his compositions are preserved in the Pepysian Library.]

THE DISEASE that has now for several years infested and destroyed the potato-crops, appears to be wearing out. Its ravages this season are evidently comparatively slight, except in Meath and Louth, in the province of Leinster. In some localities, where its traces have been detected, it presents so few of its old destructive features, as to be regarded with but little alarm. A month ago, however, there was dire apprehension as to the extent and severity of its ravages. Turnips will be, it is said, a partial failure, owing to the ravages of the diamond black moth; in some instances, this new plague has manifested itself to such an extent, that, in four or five days, the most luxuriant crop has been stripped of every green leaf, tho mere stumps of the leaf-stalks remaining, where, a few days previously, the ground was covered with a healthy and vigorous vegetation.—*Lond. Med. Times.*

THE MEDICAL OFFICERS OF THE PARISIAN HOSPITALS.—A Bill has been introduced before the French Assembly for the regulation of hospitals, in which was a clause recommending that the physicians and surgeons should be appointed by the Administration. M. Schælcher proposed that the candidates should undergo a public examination, (the Concours,) and that the most successful should be selected. The Amendment was rejected by 391 votes to 204, and the entire Bill was definitively adopted. This new regulation, we presume, does away with the principle of Concours, as far, at least, as hospital appointments are concerned; nor do we regret it, as students fresh from the schools, and mere book-men, under its influence, were selectable in preference to hard-working, practical men. Patients in hospitals require the services of men who can correctly diagnose the diseases, and apply the mode of treatment most appropriate for their cure; not those of men who are able to describe the minute anatomy, physiology, and chemistry of the human frame, but who are often worse than useless in matters of actual practice.—*Ibid.*

EXTRAORDINARY ACCIDENT.—A man was lately admitted into the Portsmouth, Portsea, and Gosport Hospital, under the following singular circumstances:—He was trying to extract a cork from a large stone beer-bottle with his teeth, when it was suddenly driven into his gullet by the force of the carbonic acid which had been generated in the bottle. Medical assistance was immediately obtained, but unavailingly, and the man was taken to the hospital,

where œsophagotomy was at once practised, and the cork, which measured about three inches and a half in circumference was extracted.

Apparatus for Transfusion.—The London Medical Times, for the 6th of September, in its notices of objects connected with medicine and surgery to be seen at the Great Exhibition, gives the following account of a very simple and ingenious apparatus for transfusion, invented by Mr. Whitehead. Its consists of a graduated glass funnel for receiving the blood, connected by a piece of flexible tube, with a glass tube about eighteen inches long, at the lower end of which is another piece of flexible tube several inches in length, to which the pipe is attached. On the lower piece of flexible tube is fixed a metallic ring, with a screw which compresses or opens the tube, and prevents or allows the flow of the blood. The pipe introduced into the vein is of the ordinary shape, and is attached to a metal plate to be bound around the arm of the patient by a piece of ribbon or tape. This apparatus is much simplified by the absence of a syringe, the force by which the blood is introduced being that of a column of blood nearly three feet in height.

Prussian Despotism has just, at Breslau, deprived a physician, Dr. Borchard, of the right to practice his art—has withdrawn from him his medical license, because, in a speech delivered in the year 1848, he is said to have used treasonable language. Being tried for this offence at the time, he was condemned by a law tribunal to twelve year's imprisonment. On an appeal to another Court, this sentence was mitigated to three; which a third and final court of appeal has reduced to two. The Government, however, not finding this punishment sufficient, has, in order to increase it even beyond the rigor of the sentence, deprived the doctor for ever of his means of subsistence. The official document proclaiming this monstrous act of injustice and cruelty has been published in all official formality, in the *Neue Ober Zeitung* under the date of the 28th inst.

Obituary.—M. Teisseir, President of the Medical Society of the department of Aube, Director and Professor of the Obstetrical School of Troyes, died a short time ago, in consequence of a dissection wound made

whilst lecturing on anatomy.—Dr. Vasse, Professor of Surgery at Bonn, died lately at Marburg, at the age of 73.—We mentioned at the beginning of this year, the death of Naegele, of Heidelberg. His son, likewise Professor at the University of Heidelberg, has just died, at the age of forty.—*London Lancet.*

RECORD OF MEDICAL SCIENCE.

OBSTETRICS.

Case of Secondary Hemorrhage, occurring on the fourth day after Delivery, the Result of the Rupture of a bloody Tumor in the Cervix Uteri. By GEORGE JOHNSTON, M. D., Assistant Physician to the Lying-in Hospital.—M. H., aged 35, a strong, robust country-woman, was admitted into the Rotundo Lying-in Hospital, late on the night of the 21st September, 1850, labor pains having unexpectedly set in about three hours before. She states that it is her seventh pregnancy, that she has five children living, one having been dead-born at the full period, for which she could assign no cause; had always easy confinements; that considering herself to be only in the eighth month, she had travelled up on foot from the country, a distance of eighty miles, about four or five days previously, for the purpose of arranging pecuniary matters, calculating that she would be able to return home in sufficient time to be confined. During her journey, which occupied upwards of two days, she suffered much from fatigue, and exposure to cold and wet, which, together with her distress of mind, occasioned by the purport of her mission, all tended to bring on premature labor. The fœtal heart could not be heard, nor had she felt the motion of the child since her arrival in town. On examination *per vaginam*, the os uteri was found to be about the size of a crown piece, breech presenting, membranes unruptured, pains apparently not of much strength. However, after a short and easy labor of about four hours' duration, the child was born with the membranes entire; on rupturing them, it was discovered to be a female of about eight months, and bore evident signs of having been dead for some time. The placenta was expelled in about ten minutes afterwards; no hemorrhage nor any untoward symptom supervened, and everything went on favorably for the first three days. The milk was secreted on the second day. At the morning visit of the 25th (her fourth day) she expressed herself quite strong; a cough which she had contracted on her journey, much better; no complaint, nor any uneasiness whatever. At half-past 1, P. M., the nurse called me in a great hurry, stating that the patient had been suddenly attacked with violent hemorrhage. On inquiry I found that she had not been out of bed, nor

had she been using any exertion. On reaching the bed-side (which was in less than a minute after hearing the report, and certainly not more than three from the first gush of blood), I found her lying on her back, countenance perfectly blanched, and expressive of great anxiety, which, with her neck, hands, and arms, was bathed in cold clammy perspiration. No pulse could be felt at the wrist; and the bed inundated with blood, which was still flowing rapidly from the vagina. The pillows were at once removed from underneath her head, thus placing her completely in the horizontal position; firm pressure was made over the uterus (which was found well contracted;) cold applied externally, and a stream of cold water was injected into the vagina and rectum. She was given three ounces of wine, with half a drachm of ergot of rye; at the same time a current of cold air was allowed to pass across her face; all of which had the effect of restraining the great flow, but not of completely checking the hemorrhage, for a slight trickling still continued. However, having restored somewhat the temperature of the body, by means of hot jars to the feet and warm blankets to the extremities, by stimulants (brandy) frequently repeated, beef-tea, &c., we were enabled once more to feel the pulse at the wrist; the color of the countenance returned slightly, giving us hopes that the worst had been overcome. The ergot was repeated, with forty drops of the acetum opii in an ounce of brandy and water, and pressure was maintained over the uterus by the hand for nearly half an hour. When about re-applying the binder, another sudden flow of blood took place, the hand being still on the uterus, and with it the expulsion of a large coagulum. She again became pulseless, and fainted, cold clammy perspiration once more bedewing the surface of her face, neck, and arms; this was succeeded by extreme restlessness with great anxiety, and the respiration became labored and gasping. Stimulants were again attempted to be administered, but they were with difficulty swallowed, and shortly after rejected; and she too soon gave evidence that all our efforts were unavailing, as she rapidly sank, just one hour and a half after the first attack of hemorrhage.

Autopsy.—The thoracic and abdominal viscera were found quite healthy, but pale and bloodless. The uterus was well contracted down in the pelvis. On closer inspection, just beneath the peritoneal covering, in the left iliac fossa, a tumor of moderately firm consistence was seen, about the size of a large walnut, having an ecchymosed appearance, which extended also some little distance on the outer side: this tumor was firmly attached to the lower part of the uterus. On removing the latter with its appendages, and laying it open from the os to the fundus, cutting in the mesial line through the anterior wall, the muscular structure was found to be quite healthy, and that portion of the inner surface which had been occupied by the placenta was well plugged with a dark and firm clot, portions of which were seen entering the mouths of the uterine sinuses, thus proving that they had not been the source of the hemorrhage. On the left side of the cervix, about one inch from the os uteri, was observed a ragged, sloughy-looking opening, the edges of which were very irregular, and of a black ash-grey color. This opening,

which was large enough to admit two fingers easily, communicated with a cavity the size of a small orange; it seemed to be formed in the substance of the cervix, and its external wall was found to be the projecting tumor before mentioned, as seen from the outside. On laying open this cavity, and washing away some loose clots (but carefully observing that there were no laminated coagula,) the lining membrane was found rugous, of a firm consistence, and resembling very much in appearance the mucous membrane of the vagina. Opening into this sac were seen the mouths of five or six blood-vessels large enough to admit a small bougie. Upon introducing a blowpipe into these open mouths, and inflating them, it was clearly demonstrated that they communicated with the uterine sinuses, for bubbles of air could be driven out of the vessels at the edge of the uterus where we had divided it, and with care and delicate manipulation pieces of bougie could be passed for a distance of nearly three or four inches along these ducts, which ran in various directions, some longitudinally, some transversely, and could even be protruded in one or two instances through their cut openings.

This case was read before the Obstetrical Society on the first night of its meeting this session, when it was considered by some of the members present to be a thrombus or bloody tumor occurring during labor. This opinion, so far, at least, as the former part of it is concerned, has been corroborated by Dr. Carte, the Curator of the College of Surgeons' Museum, who was kind enough to make a careful examination of the sac; but at what period the formation of it took place remains doubtful, for it hardly could have occurred during labor, which was extremely easy, as is evidenced both by the short time it occupied, and the manner in which the fœtus was expelled, viz., in the membranes. It is, therefore, a case of peculiar interest, as well as an instance of one of the many casualties the obstetrician is liable to encounter in his course of practice, by which his reputation might be placed at stake and his character deeply involved; distressing, too, from its being almost, if not wholly, beyond his control, and which the vigilance of his most watchful anxiety would be unable to foresee.—*Dublin Quarterly Journal.*

Early Viability.—A lady, aged thirty-five, was confined, two months and seventeen days after having been driven over a rough road in a badly hung vehicle, of a very weak and small child; the whole extent of the gestation, calculated under circumstances very favorable to accuracy, had been exactly six months and ten days. The skin of the child was hardly formed of consolidation; there was no hair; the toes looked like a row of small pearls at the extremity of each foot, the fingers were so small that they were compared to lucifer matches; in fact, Dr. Ducos hardly thought the child could live.

As it seemed, however, inclined to swallow, toast-and-water mixed with milk was given. For the first ten days only, two tablespoonfuls of this fluid were given daily, the child always kept close to the fire, When two day old the infant took the breast, but it stopped at every

second act of suction, and these were so feeble that the mother hardly perceived them. She was therefore obliged to procure another child to empty the breasts. In this weak state the little creature continued until the time which would have been the natural term of gestation, without increasing much in size, but a little in weight. Six weeks after this time it began now and then to smile, being then full four months old, and has since been thriving satisfactorily.—*London Lancet, from Gazette des Hôpitaux.*

The Obstetrician's Toilet: Hints by PROFESSOR SIMPSON.—In a recent discussion upon Puerperal Fever, before the Medico-Chirurgical Society of Edinburgh, Dr. Simpson urged "the great importance of carefully ridding the fingers from all matters in the least degree likely to prove hurtful, if inoculated into the vagina of a puerperal patient." Chloride of lime, he said, "has been recommended by various practitioners as a good wash for ridding the fingers from morbific matter." Dr. Simpson "has used for the same purpose for years, daily, (or rather, generally, often during the day,) a solution of cyanide of potassium, which is more effective even than chloride of lime; and it had this other advantage, that it removes, readily and at once, all such stains as the fingers of the accoucheur are apt to receive in treating uterine diseases—with nitrate of silver, iodine and the like.

Dr. Simpson objects to the use of gloves. "He had been informed of an instance by Professor Patterson, in which a medical gentleman, after having lost several cases of puerperal fever, got rid of the disease in his practice by changing his clothes, and using chloride of lime, etc.; but it again returned to him, when he happened to deliver a patient, immediately after wearing a pair of gloves which he had used during the time of the puerperal epidemic: and certainly, if there was any piece of dress more apt to retain the contagion than another, it was this useless and superfluous appendage to our attire."—*Edinbargh Monthly Journal*, July 1851.

On the Use of Indian Hemp as an Excitant of Uterine Contractions.—DR. CHRISTISON, of Edinburgh, considers Indian Hemp, (Cannabis Indica,) to possess a remarkable power of increasing the force of uterine contraction during labor. He reports, in the August number of the *Edinburgh Journal of Medical Science*, some cases in which it was given, with this view, at the Maternity Hospital of Edinburgh. As compared with the action of ergot, that of Indian Hemp presents the following points of difference: "First,—While the effect of ergot does not come on for some considerable time, that of hemp, if it is to appear, is observed within two or three minutes. Secondly,—The action of ergot is of a lasting character, that of hemp is confined to a few pains shortly after its administration. Thirdly,—The action of hemp is more energetic, and perhaps more certainly induced, than that of ergot."

PATHOLOGY AND PRACTICE OF MEDICINE.

On Anasarca in Disease of the Heart. By M. CHOMEL.—The progress of infiltration is ordinarily slow and progressive in affections of the heart; but, nevertheless, nothing is more common than to meet with individuals among the working-classes, who, while presenting the appearance of health, and without having manifested any sign of disease, are seized with anasarca, the physical and material signs of cardiac alterations not being present, or only, at all events, to a very slight degree. This is because there are causes prevailing in this class of society,—such as excess of labor, fatigue, watchings, misery, drinking,—which, in a measure, precipitate the course of the disease. These causes come in addition to the natural influence of the disease; and the anasarca appears at a period when without these it would not have manifested itself. So, when these causes are removed, and the patient is kept at rest, and sheltered from the unfortunate conditions that have given rise to so serious a complication, the œdema diminishes daily, and the patient soon leaves the hospital believing himself cured. New exposure to excesses, fatigue, or misery, reproduce the anasarca, which may be again dispersed, and that for several times; but after a certain number of such attacks, it in the end becomes permanent.

Frequently the appearance of an acute anasarca, throws a ray of light on obscure and embarrassing cases, indicating in a great majority of cases an acute disease of the heart. Doubtful endocarditis and pericarditis are often thus revealed to the observer by general œdema. M. Chomel thus considers that in the case of anasarca coming on, when we can discover neither change in the blood nor albumen in the urine, we are authorized in admitting the existence of disease of the heart or large vessels, even when all material signs of this affection are completely absent.—*British and Foreign Review, from L'Union Médicale*, 1851, No. 26.

On the Perforation of the Intestinal Canal by Worms. By Dr. BUCHNER.—The perforation of the intestinal canal by lumbricoids has often been denied. In No. 1 of the 'Med. Zeitung,' for 1850, however, Dr. Köppe relates a case in which such perforation seems to have resulted; and in the present note Dr. Buchner relates another. A strongly made woman, somewhat advanced in years, died in from eight to ten hours after the appearance of symptoms of acute peritonitis. On examination, the intestinal contents were found effused, and a large *ascaris lumbricoides* was lying in the immediate vicinity of the duodenum. In this gut there was observed an exactly circular hole, having sharply cut borders, and presenting an appearance unlike any ever seen in the intestinal canal by the author. It was accompanied neither internally nor externally by any signs of inflammation or other diseased appearance. No other cause of perforation could be discovered; and within the

duodenum other lumbricoids were found.—*Ibid, from Med. Zeitung*, No. 28.

On Amaurosis in Albuminuria, and Hyperacusia in Facial Paralysis. By M. LANDOUZY.—M. Landouzy has recently made additional communications upon these subjects to the Academic. In regard to the occurrence of *disturbance of vision in albuminous nephritis*, his first publication took place in 1849, and although some observers have since failed to detect this coincidence, several others, among whom are MM. Roux, Forget, and Cunier, have been more successful; and in this Second Memoir, the author believes himself fully authorized in concluding:—1. That disturbance of vision is almost a constant symptom of albuminous nephritis, constituting a new species of amaurosis, which may be termed *albuminuric*. 2. The amaurosis is not attributable to a deterioration of strength. 3. It very frequently is the initial symptom, appearing before other pathognomic signs. 4. It appears, disappears, and returns, without exactly corresponding to the phases of the albuminuria or the œdema. 5. It leads to the belief that albuminous nephritis is the result of a change in the ganglionic system. In a still more recent communication (January 28) M. Landouzy refers to additional confirmatory observations, and states that he has now had frequent opportunities of remarking the amaurosis in albuminuria, consequent upon the application of two large blisters.

Excessive sensibility of the organ of hearing in facial paralysis is another of the unobserved coincidences to which M. Landouzy claims the merit of drawing attention. It is true that such was observed by M. Roux in his own case many years since, but was then considered as a mere accidental anomaly. M. Landouzy has now collected several cases in which hyperacusia existed, and from a consideration of these, draws the following conclusions:—1. Hyperacusia of the paralysed side is an almost constant symptom in facial hemiplegia, when independent of all cerebral affection. 2. It appears at the same time as the paralysis, and disappears before this. 3. It may be attributed to paralysis of the *tensor tympani*. 4. Hyperacusia may be present in some cases without facial paralysis. 5. Whether coinciding with the hemiplegia, or existing independently, it disappears spontaneously and completely, in a space of time varying from a fortnight to three months. 6. In some cases, in order to verify its existence, it is necessary to impress the ear with a loud, sudden sound, and the more so the longer the affection has continued. 7. Treatment directed especially to this symptom almost always fails to procure relief.—*Ibid, from Gaz. Med.*, 1850.

Tannin in Cholera.—During the recent epidemic of cholera, tannin was recommended and employed by the younger Græfe of Berlin. He prescribed it in upwards of thirty cases, several of which were in a state of collapse, and of these two only proved fatal. The dose was from five to ten grains, half-hourly or hourly. Dr. Willebrand, of Finland,

in reporting the treatment to the Medical Society of Sweden, states that he was himself a witness of this brilliant success.—*Lond. Lancet, from Förhandlinger vid Svenska Laakare-Saallskapets Sammanskomster.*

Lemon Juice in Acute Articular Rheumatism.—The foreign journals contain fresh testimony in favor of the treatment of rheumatism by lemon juice. Dr. Perkins, of Brussels, and Dr. Giraud, of Grenoble, report in its favor in the *Journal des Connaissance Medico-Chirurgicales.*

MATERIA MEDICA AND THERAPEUTICS.

Report of a Case of Accidental Poisoning by Tincture of Aconite. By JOHN TOPHAM, M. D., London.—A woman, twenty-seven years of age, laboring under the effects of anæmia, conjoined with leucorrhœa and gastrodynia, had a prescription given her, consisting of citrate of quinine and iron, dissolved in water. The dispenser, owing to some error in compounding, added half an ounce of tincture of aconite to the eight-ounce mixture ordered. At eleven o'clock in the morning, she took one tablespoonful of the above compound, and immediately felt a sensation of numbness in the tongue, accompanied by difficulty of swallowing; soon afterwards she began to cry violently, this act being accompanied by convulsive twitchings of the facial muscles. Immediately after this she lost the power of walking, and began to eject a quantity of mucus from the stomach. At half-past two o'clock, I saw her, and observed the following symptoms, which, joined to the details just mentioned, caused me to suspect that aconite had been taken. She was lying upon a sofa, resting upon her back, with her eyelids closed, and the pupils slightly contracted. She was quite unconscious when spoken to, and during an hour's observation she only spoke intelligibly twice, and then said, "What is it?" Every now and then she uttered a peculiar plaintive cry. She was continually moving her tongue round the interior of her mouth, from time to time thrusting the organ out beyond the lips, and moving it from side to side. The pulse was weak, but regular. The bystanders said that it had been intermittent. The hands and feet were cold. There was constant lachrymation, insomuch that a woman was continually wiping the sufferer's eyelids with a handkerchief. The intensity of symptoms varied greatly; sometimes she would lie quite still for several minutes, and then all at once be seized with a paroxysm of sighing, every now and then exclaiming, "What is it?"

I gave her sesquicarbonate of ammonia, with compound tincture of cardamoms, and hot brandy-and-water, ordered her bed to be warmed, and had her taken up stairs. Having to a certain extent rallied, she managed to go up a steep staircase, assisted by one person. She said that "her face felt very large," and that "all her teeth were coming out." During the night she had very little sleep, her rest being disturbed by dreams that she was falling from a height.

The next day she complained of pain in the lower part of the back and of a numbness in both arms, but these sensations soon subsided, and

no ill effects remained. After recovering, she stated that she had not the slightest recollection of what had occurred during two hours—*i. e.* from half-past twelve till half-past two o'clock.

Remarks.—The above is a good illustration of the effects of a poisonous dose of a preparation of aconite. At first sight the symptoms might have led to a suspicion that hysteria was the cause of the phenomena observed, but the sudden loss of sensation in the branches of the fifth nerve distributed upon the mucous lining of the tongue and the interior of the mouth, followed by vomiting, paralysis of sensation in the arms, &c., sufficed to suggest that poison had been taken, and that that poison was *aconite.*

The case also illustrates the uncertainty in the effects produced by the preparations of this substance, and suggests the degree of care which should be taken in prescribing them.

The exact quantity of aconitina contained in the tincture given in the present instance it is impossible to determine, owing to the inadequacy of our tests for that alkaloid; but upon inquiry at the manufacturer's, it was found that the tincture had been prepared by macerating four ounces of the root in one pound of spirit. Of this the patient had taken fifteen minims, a small dose, but one which, from a remark made by Professor Taylor, upon the authority of Dr. Pereira, would appear amply sufficient to occasion dangerous symptoms. Of course the strength of the tincture employed must be here taken into account, and this varies extremely; that prepared according to Dr. Fleming's directions consisting of powdered tubers and rectified spirit in the proportion of sixteen ounces (Troy) to sixteen fluid ounces, and there being some five or six other formulæ known. Pereira states that the 150th part of a grain of aconitina has sufficed to endanger the life of an individual; and the late Dr. Male, of Birmingham, died from the medicinal effects of eighty or eighty-seven drops of Fleming's tincture, taken at ten doses spread over a period of four days, the largest quantity swallowed at one dose being ten drops; whilst a case of recovery, after a dose of *two grains and a half* of aconitina, has been related by Dr. Golding Bird.—*London Lancet.*

Deaths from Chloroform.—A lady, thirty-six years of age, of a biliosanguineous temperament, who had had three children, and whose health had always been satisfactory, was very much troubled with toothache. She had had four molar teeth extracted in the same sitting six or eight years previously; after which operation she had been seized with a convulsive fit. A little while ago the toothache became very distressing again, the patient had several nervous attacks, and was tormented with the idea that her dental pains exposed her to much danger.

She sought the advice of a practitioner, and consented to a new extraction, stipulating, however, that she should take chloroform. Her husband held her hand, whilst her head was leaning against her maid; but before she had inhaled any chloroform, she started up, and attempted

to run away, using very incoherent language. When a little calmer, she sat down again, and a cloth, upon which a little less than two drachms of chloroform had been poured, was placed before her mouth and nose.' The patient soon pointed out, by a few words, that the chloroform was beginning to take effect, and then became insensible. The operator extracted three teeth with the greatest promptitude, and only stopped when the husband directed his attention to the patient, who seemed to have fallen into an extraordinary state. On close examination, she was discovered to be quite dead, and the best directed efforts were fruitless in reviving her. (Dr. Eissen in *Gaz. Med. de Strasbourg.*)

Another case of death from the use of chloroform occurred at the Seamen's Hospital, London, on the 8th of last July, in an operation for the removal of a diseased testis.

Experiments on the Effects of Nicotine.—This alkaloid, which has acquired some renown from the crime and execution of Count Bocarmé, in Belgium, was administered to various animals by M. Vleminckx, of Brussels. The following results were obtained:—

1. One drop killed a sparrow in twenty five seconds. 2. Half a drop destroyed another sparrow in forty seconds. 3. Two drops killed a cock of large size in forty seconds; the same effect being produced in a minute, by the same dose, upon a rabbit. 4. A small dog died in two minutes, thirty seconds, after taking two drops of nicotine, dissolved in ten of sulphuric ether. 5. Four drops, in the same menstruum, killed a cat in three minutes. 6. One drop was placed on the conjunctiva of a middle-sized dog; vertigo, weakness, and trembling ensued, and the cornea became hazy and rough. After six minutes he recovered. Two drops were then put upon the tongue of the same dog: he soon fell, after tottering about, and eventually recovered. Another and larger dog had ten drops: the symptoms were of the convulsive character. Vinegar was poured down his throat, and he regained his powers soon afterwards, though he threw up the vinegar.

The inspections proved that the most constant pathological changes were, congestion of the vessels of the pia mater, and especially a very intense congestion of the lungs.—*London Lancet.*

Solution of Gutta Percha in Chloroform.—Dr. Rapp, of Bamberg, having observed that collodion, when applied for surgical purposes, loosens, if the skin is moist or transpiring, or if blood trickles down, has therefore, in place of it, employed a solution of gutta percha in chloroform, 7 grs. to ʒj., and speaks of it as forming a very pleasant and effectual adhesive dressing. A solution of one part to eight or nine, is as easily applied by a pencil as collodion.—*London Med. Times, from Buchner's Repert.*

On Aconite in Lichen and Prurigo. By M. CAZENAVE.—Believing that, in papular affections of the skin, the essential thing is to subdue hyperæsthesia, of which the eruption is but the consequence, M. Cazenave has been long in the habit of employing the extract of aconite with great success. The intense and irresistible itching rapidly diminishes, and afterwards ceases. He divides fifteen grains into forty pills and gives one or two night and morning.—*British and For. Med. Chir. Rev., from Bullet. de Thérap.*

SURGERY.

On Bronchotomy in Œdematous Laryngeal Angina. By M. SESTIER.—This is a very elaborate and valuable paper, having for its object, the inculcation of a more frequent recourse to operative procedures for the relief of œdematous laryngeal angina, commonly called œdema of the glottis; a term objected to by Dr. Sestier, inasmuch as the arytenoid-epiglotteal folds are much oftener the seat of the disease than the rima glottidis. The author bases his remarks upon 168 cases of the disease which he has collected, in 36 of which the operation was performed often under very unfavorable circumstances, saving life in 13 and prolonging it in 8, although death eventually occurred. He minutely analyses the circumstances under which the disease occurred, and exhibits the amount of success to be expected from the operation, accordingly as it is applied to the different categories into which he has distributed the cases. He also compares the results obtainable from it in this and in other affections; and finds that, while the operation for œdema is less successful than when undertaken for erythematous laryngitis, or for the removal of foreign bodies, it is more so than when performed for croup.

From his investigations it results, that the probability of its success is very much dependent upon the prior healthy state of the larynx, and the fact of the patient not suffering from other serious disease. But he believes it should still be performed even when the œdema is consecutive to severe laryngeal disease, though it has then succeeded only in 1 out of 19 cases, during convalescence from other disease though it has failed in 4 out of 6 such cases, and when concomitant with various other diseases, though it has then failed in 15 out of 17 times. In fact, he would recommend it in all cases, save when the angina is the *ultimate phenomenon* of incurable and advanced disease, the fatal issue of which would be probably accelerated by it. In several such cases, however, the object would be only to prolong life, and this should be distinctly stated; but in others, apparently desperate, nature's resources would be by it brought advantageously into play.

As to the *epoch* at which the operation should be undertaken, this must *not* be as soon as the disease is recognized, for in 28 well-marked cases it was cured by ordinary means; and these, when energetic, have several times proved of avail even after severe suffocative paroxysms and great

intervening dyspnœa have become established. On the other hand, we must *not wait* until it is absolutely certain that the patient will speedily die unless the operation be performed, as he would then often die during or soon after it. We must not be deceived by the dangerous calm which follows prolonged suffocative paroxysm, and is only the precursor of speedy death. It is difficult to fix any precise period; but it may be laid down, that if in spite of active means rapidly employed, the difficulty of respiration continues to increase, *the respiratory murmur heard by auscultation becomes more and more feeble,* and the suffocative paroxysms are on the increase, the operation is urgently indicated; and it is far more safe to operate *too soon* than *too late,* success being proportioned to the early performance.

There are four circumstances under which the performance of the operation should be hastened. 1. *The debility of the patient at the period of the invasion of the angina;* and doubtless this is the reason why it has so frequently failed, when had recourse to during convalescence from other diseases. The more enfeebled the patient prior to the invasion, the earlier should be the operation. 2. The presence of *deep-seated lesions of the larynx* prior to the invasion. As these have induced the œdema, so they will maintain it. 8. *Œdema of the interior of the larynx.* In 41 autopsies out of 107 collected by the author, partial intra-laryngeal œdema prevailed in 18, and complete in 23, the *chordæ vocales* being almost always implicated in both. In four-sevenths of 57 cases of laryngeal œdema, in which the interior of the larynx has been described, this has been present. It adds much to the danger of the case, inasmuch as it is inaccessible to direct applications, and the close texture of the cellular tissue here causes the disease to yield less readily to indirect ones. Its diagnosis is therefore important, and is derived from observing (1,) that it never occurs but in patients who were already ill from some cause when the œdema appeared; (2,) when found in œdematous angina in connection with inflammation of the fauces, the patients have already suffered from some other forms of disease, and especially from serous diatheses; (8,) it has been found in three-sevenths of the cases of œdematous angina dependent upon laryngitis, and especially when the serous diathesis was present; (4,) the facility of *expiration,* as contrasted with that of *inspiration,* characteristic of ordinary œdematous laryngeal angina, was not observed in seven-twelfths of the cases in which intra-laryngeal œdema was present—the obstacle to respiration being then a more fixed one; (5,) in 11 out of 12 cases of laryngeal œdema in which the fauces were found infiltrated, the œdema was also intra-laryngeal. 4. *Rapidly increasing œdema of the soft parts of the neck,* which renders the operation difficult or impossible.

M. Sestier recommends an operation, even if the patient seems in the *agony of death,* providing this depends upon the œdema itself, and not upon preceding irremediable disease. Cases are related of life being thus saved. Even when the patient is *apparently dead,* we must not always renounce the operation. A recovery under these circumstances occurred to M. Trousseau; and some of the patients who have died du-

ring the preparations for the operation, or just before the arrival of the surgeon, might probably have been saved. If *during the operation* the patient sink as if lifeless, the operation must be rapidly continued, and in this way two recoveries were procured.

In this disease we should always carefully watch the patient *under the expectation of having to operate.* 1. The course of the disease is frequently excessively rapid. In more than half of 65 cases in which no operation was performed, death occurred at various periods within 24 hours. 2. Certain forms are especially remarkable for their rapid course, as those dependent on inflammation of the fauces, on anasarca after scarlatina, on cachectic diathesis; as also when consecutive to a wound of the neck, with infiltration of blood into the cellular tissue external to the larynx. On the other hand, its progress is slower when it is dependent on deep-seated laryngeal lesions. 3. When the disease assumes the continuous form, it is much more rapid in its course than is the paroxysmal. 4. Sometimes while the patient's condition seems ameliorated, he yet dies suddenly amidst paroxysmal suffering. A remarkable calm after severe paroxysms is sometimes a precursor of death. 5. The nocturnal aggravation of the disease is indubitable, and calls for watching.

Among the varieties of *operative procedure,* the author prefers *crico-tracheotomy,* by which the difficulty often arising from an œdematous state of the neck is avoided, and the penetration of air into the veins, (this accident occurred twice in 36 operations, although no mention is made of it in 333 cases of bronchotomy for other affections,) and of blood into the air-passages, rendered less likely. It is far easier than tracheotomy, and fitter for the inexpert surgeon, called in on emergency. He gives minute directions for the performance of the operation; but as these do not apply especially to this disease, we need do no more than refer to them.—*Ibid. from Archives Générales.*

Case of Simulated Neuralgia from a common Pin, which had been swallowed, and in eight months after emerged from the surface of the body. By H. C. Field, M. D.—After some remarks on cases in which pins have been said to have been swallowed, or thrust into parts of the body, Dr. Field relates the following case:

Case. Mary M., a healthy woman, aged 30, in July, 1842, came to the Stillorgan Dispensary. She said her mouth had been full of pins: that she had accidentally swallowed one, which was choking her. Dr. Field immediately relieved her by using a probang. In the following October, he was requested to visit her as a dispensary patient; she then told him that she was in the greatest agony in her hip-joint, extending down the limb on the same side. He immediately bled her largely from the arm, had her cupped over the seat of pain, and gave her two grains of opium. The next day, she had some short sleep, but the pain was still very great. After exhausting every means he could think of, narcotising, mercurialising, blistering, and tonics, Dr. Field at length advised her to try a hospital. After submitting to various remedies in Steevens'

Hospital, without more than temporary relief, she was advised to go into the country for change of air, being greatly emaciated. She came again, greatly reduced in flesh, to the country, where Dr. Field saw her, but did nothing for her; and after remaining some time at home, suffering still from what appeared to be severe neuralgia, and being much reduced, she one day felt a sudden remission of the pain, and three days after it left her. From this time she rapidly recovered her health and strength, and was soon able to leave her bed. Shortly after, she found what she called a sore pimple on the inside of her thigh, which she poulticed and plastered, but could not cure; and having quite regained her strength, after an illness of *eight months*, she walked to the dispensary. On examining the pimple, Dr. Field found in its centre a sharp point; and after a little, he extracted, by its point, a large pin. Dr. Field thought that the simulation of idiopathic disease, for so long a time by a foreign body, rendered it extremely interesting, and established the *possibility* of a common pin, after being swallowed, emerging from the surface of the body.—*London Journal of Medicine.*

A modification in the Operation for Hare-lip.—M. Coste, chief surgeon of the Hôtel Dieu of Marseilles, has been endeavoring to devise the means of obviating the ugly notch which too often remains after the operation for hare-lip. M. Coste states that the modification proposed and practised by M. Malgaigne is only applicable in double hare-lip, and that in the simple deformity M. Malgaigne's method produces an unsightly prominence.

The author in simple hare-lip, (which lies generally on the left side,) has succeeded in avoiding the notch altogether, by cutting a horizontal flap in the red part of the lip on one side, and a kind of half mortise on the other. In paring the margins of the fissure, he takes off more substance than is generally done; the flap and mortise are well secured by twisted suture, and by one of the diminutive spring-forceps called "serre fines;" one transverse needle is placed a little higher up, and no application whatsoever made, so that the progress may be more accurately watched. M. Coste has thus succeeded, upon a little boy, twelve years of age, in completely avoiding the above-mentioned notch.—*London Lancet.*

A Case of Obstruction of the Colon, relieved by an Operation performed at the Groin. By James Luke, Esq.—The subject of this report was a man aged sixty, who, on December 16, 1850, first complained to the author of feeling generally unwell. He had no pain, but his countenance was depressed, his eyes sallow, and his tongue coated. The bowels were confined, and lately medicine had acted with difficulty on them. An aperient was ordered, and on the following day he passed a small lumpy motion, but without relief to the symptoms; castor-oil was ordered, but after a time was rejected by vomiting. On the 18th, there was no relief from the bowels; and he vomited everything he took. From this time,

he progressively got worse, in spite of all the means resorted to for his relief. He complained of pain chiefly about the region of the cæcum. The transverse arch of the colon could be felt distended and tympanitic. A careful observation of the case had led the author to believe, that there was obstruction in the bowel about the sigmoid flexure of the colon, and it was resolved, as a last resource, to operate. The operation was performed on the 23rd. Mr. Luke opened the abdominal parietes near the groin, by an incision four inches in length, a little to the outside of the course of the epigastric artery, the lower extremity of which incision terminated a little above Poupart's ligament. The peritoneum was opened to about two inches. On passing the finger down the surface of the intestine, which now protruded, a diseased mass could be felt, which appeared to encircle the intestines. The bowel was then opened above this part; a large quantity of fæculent matter came away, and the patient expressed himself as relieved. On now passing the finger into the bowel, it was found to be impervious about two inches below the aperture. After the operation, the recovery of the patient was rapid. On the second day, fæces passed *per anum*, and continued to do so for more than a month, when their passage through the natural opening ceased; it was again partially restored, but from this time the greater part of the fæces passed by the wound. This was closed by a well-fitted pad, and he had been enabled since to pursue his ordinary occupation almost without interruption.

The author then remarked on the danger of protracted delay in relieving such cases; a delay which is, however, to a great extent rendered necessary by the difficulties of diagnosis. The distension of the colon and the evidence afforded by the proper introduction of the long tube, were pointed out as the two most accurate means for determining the seat of obstruction, when it is situated at the lower part of the colon. The advantages of the operations of Amussat and Littre were then compared, and the author, while admitting the advantage gained by operating in the loins, as proposed by the former—of not opening the peritoneal cavity—yet thought that the operation in the groin offered certain advantages. By the operation in the loins nothing more could be done than opening the intestine; but this might in some cases be improper—as where obstructions were produced by fibrous bands overlaying the intestine, or by strangulations, the result of causes acting exteriorly to its tunics. In these cases, the proper treatment is to divide the bands, or relieve the cause of strangulation. In the event, too, of an error of diagnosis, the opening in the loins does not provide any facilities for correcting the error. The danger of total failure of affording relief consequent upon this state of things, must therefore be attributable as a demerit to the operation in the loins. Besides, the opening cannot be conveniently attended to by the patient himself, and there exists frequently a great disposition to contraction, from the great depth of the wound, which requires renewed surgical interference. With the exception of the necessary peritoneal section, the operation of opening the abdominal parietes at the groin, in all cases of obstruction, or suspected obstruction, in the lower part of the colon, appeared to the author to be preferable. It af-

fords facilities for modifying the treatment, either by opening the intestine, when incapable of relief by other means, or by dividing or removing any existing cause of strangulation. It enables the surgeon to extend his search within a limited range, in the event of the diagnosis proving incorrect; it allows him to open the bowel as close as possible to the seat of obstruction, and it secures to the patient the facilities for attending to his own comfort.—*Lon. Jour. of Med.*

Successful Case of Ovariotomy. By JOHN BEALE, ESQ.—The patient was a woman, aged 30, unmarried. The ovarian tumor was hard to the touch in the left iliac region and left hypochondrium, but soft and fluctuating on the opposite side, evidently in two distinct sacs, moveable, and not tender. It was removed on December 4, 1850, about a year after it was first perceived. The incision was ten inches in length, extending from the scrobiculus to the pubes. Two cysts were punctured, and their contents removed, before the tumor could be extracted; the pedicle was tied by a double ligature passed through its base, and the tumor was then separated as near as possible to it. The uterus and right ovary were healthy. Everything went on favorably; on the 15th of December, she was able to walk about the room; and on the 25th, the ligature came away. The tumor was 3 ft. 2 in. in its largest circumference, and 2 ft. 1¼ in. in its smallest; it weighed 25 pounds; it was multilocular, marked on the surface by bands of white fibrous tissue corresponding with the septa of the cysts. The cysts varied very much in size, and in the density and tenacity of their contents; in the smaller ones, the fluid was clearer and thinner. The average specific gravity was 1010, but the fluid contained a very large quantity of albumen. The total amount of fluid was from 21 to 23 pints.—*Ibid.*

New Application of the Inhalation of Chloroform.—M. Guisard, doctor of medicine, and member of the French Assembly, has written to *L' Union Médicale*, to state that his son, about three years of age, and affected with phimosis, had just been relieved from very distressing symptoms by inhalations of chloroform. It appears that the little patient experienced great agony in passing urine, and the distress was so great that he overcame the necessity of performing this function, and obstinately refused to relieve his bladder.

He was placed under the influence of chloroform, so that the phimosed prepuce could be incised, and hardly had its effects taken place than the urine began to flow, and the bladder was emptied. The next day, the child was equally obstreperous, and the same means brought about the same results. M. Guisard thinks that these facts may open a new path for the treatment of the retention of urine or of fæcal matter.—*London Lancet.*

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ORIGINAL COMMUNICATIONS.

Lectures on Scarlet Fever. By CASPAR MORRIS, M. D., late Lecturer on Practical Medicine in the Philadelphia Medical Institute.

LECTURE IX.

We now come to the consideration of the treatment of those diseased conditions which are commonly recognized as the *sequelæ* of scarlet fever, though they may perhaps be considered, with greater propriety, a mere continuance of the diseased action caused by the specific poison.

You will remember that I described them as the consequences of the primary disease, and spoke of them as susceptible of division into two classes. Those which appear to be the mere continuation of the local lesions developed during the progress of the disease itself, ulceration of the throat, enlargement of the cervical glands, with infiltration of the cellular tissue of the adjacent parts, abscesses about the neck, and inflammation of the ear, were grouped together as the first class: while

the inflammation of the endocardium, or of the kidneys, and the dropsical effusion and rheumatic fever, were arranged as the second, and an attempt was made to exhibit the connection of the dropsical effusion with the interruption of the functions of the emunctories of the skin and kidneys. This division was not adopted without design, and has reference to the treatment appropriate to the several groups.

The ulceration of the throat requires no change in the treatment which has already been suggested as appropriate to the anginose symptoms during the primary stage. The lime water, solution of chloride of soda, sulphate of copper or nitrate of silver, may be injected as detergent and stimulating applications for the cure of the internal affections, should they not subside spontaneously with the decline of the fever: while fomentations are still applied to the external swellings. If suppuration occur, the abscesses should be discharged so soon as the matter approaches near enough to the surface to permit the safe resort to the lancet.

The affections of the ear which complicate scarlet fever in its progress, or are developed as sequelæ, should always receive prompt attention, as they not unfrequently result in the entire destruction of the diseased organ. There may be *otitis* or acute inflammation, or mere *otorrhœa*. The least important cases are those in which the inflammation commences in the meatus auditorius externus. This may occur at any time during the progress of the disease, but most commonly commences about the fourth or fifth day. If the patient be a young child, it will be found more drowsy than usual, and when awake, more fretful; and if old enough to express the seat of distress, it will indicate one or both ears. In some cases, however, there is little or no pain, and the first intimation of any local lesion will be derived from the stain of the cap, or pillow-case, by a glairy, purulent discharge, which excoriates the concha as it flows over it, and occasions a vesicular eruption wherever it touches the skin. Whether the accumulation of this matter in the ear produces an extension of the disease to the tympanum, or the membrana tympani itself takes on the inflammatory action, it not unfrequently happens that even those cases which are attended by little or no suffering in the beginning, become very

serious in their progress, and result, finally, in the destruction of the membrana tympani and discharge of the ossicula.

During the first few days, the external meatus should be kept perfectly cleansed by the injection of simple warm water with a little pure castile soap dissolved in it; after which, if the discharge still continue and become fœtid, the weak solution of chloride of soda, or sulphate of copper may be employed.

The injection of the ear should never be entrusted to the mother or nurse. Ignorant of the structure of the parts, they are either restrained from the effectual use of the remedy by apprehension of doing mischief, or employ an undue force and injure the inflamed membrane. Where the ulcerative process has destroyed the membrana tympani, especially, great care is requisite not to throw the fluid so far into the cavity that it shall lodge there and become a source of additional irritation.

Even the cases which originate externally, sometimes result in the entire destruction of the ear; but where the inflammation is extended from the fauces through the eustachian tube to the internal ear, the pain at the time of invasion is much more severe, and the conseqences are much more serious. In the case of infants or young children, this internal affection is first manifested by sudden shrieks, like those of meningitis, accompanied by grinding of the teeth and violent febrile excitement; these symptoms may continue many days before any discharge from the external ear affords positive evidence of the site of the inflammation. These are the cases which result, of necessity, in the destruction of the organ, and lay the foundation for necrosis of the petrous portion of the temporal bone, and occasionally give rise to inflammation of the dura mater and death. It is not at all uncommon for the matter to find its way into the mastoid cells, and to give rise to abscesses behind the ear, which discharge externally; and leave openings, through which pus, contaminated by the dead bone, is discharged during a series of years; making the patient an object of disgust and pity by the excessive fetor. I have known both ears thus destroyed, reducing the child to the condition of a mute.

This extension of the inflammation from the fauces to the ear, may occur at any period; either during the progress of the scarlet fever, or after the primary symptoms have declined. In either case, it demands prompt and energetic treatment; and unless the

prostration of the vital forces is so extreme as to render the recovery of the patient hopeless, *leeches* should be applied to the mastoid process, followed by a blister. No apprehension of sloughing or ulceration should be allowed to interfere. The introduction of warm olive oil and laudanum into the ear may be resorted to for the temporary relief of the suffering, simultaneously with these applications; and morphia may be applied afterward to the blistered surface, in doses appropriate to the age of the patient.

Croup, when it occurs as a complication during the first week of the disease, should be treated by emetics of alum or sulphate of zinc. Should it be developed during the convalescence, the disease of the larynx will partake of the character of that of the adjacent parts, and if that be one of active inflammation, leeching may be safely resorted to; the quantity of blood drawn being regulated by the degree of reaction which is present. Cases of this kind form the connecting link between the first class of sequelæ and the second; to the consideration of which I shall next invite your attention.

In taking leave of the primary stage of the disease, and the local affections associated with, or immediately dependent upon it, we encounter an entirely new condition of the system, one of active inflammation.

You will remember that the *malignant* form of scarlet fever is less likely to be followed by those sequelæ which I have grouped together as the second class, than the *simple* and *anginose*. Though in the former, the powers of the system may be so far exhausted that it is long in recovering its healthy tone, and the convalescence may be protracted to many weeks, and rendered more tedious by the condition of the throat or ears, there appears to be little or no tendency to the secondary inflammations or dropsical effusions which so frequently follow even the mildest cases of the latter. These sequelæ are always of an inflammatory character, and in severe cases the safety of the patient depends upon the promptitude and vigor with which depletion is practised. They most frequently occur, you will remember, between the 10th and 20th day from the development of the primary symptoms, and are all of them ushered in by loss of appetite, languor, and, in cases of children, fretfulness; and are generally excited, as you will re

member, by errors in diet or exposure to vicissitudes of temperature, though they occur without such exciting cause with sufficient frequency to justify the suspicion that they are, in reality, dependent on the original influence of the miasm which gives rise to the disease of which they would then be merely the latter stage, rather than a sequela. They are all accompanied by a dry, heated, condition of the skin; a suspension or great diminution of the secretion from the kidneys; a tense and rapid pulse.

The endocardial inflammation, though not the most common, is the most formidable of these sequelæ, and may be recognized by the extreme rapidity of the pulse, the disposition to sigh, and especially the pain in the region of the heart. I have already indicated the plan of treatment which I think adapted to this case, when I alluded to it in the description of the disease. A decided and immediate impression should be produced by free venesection; a full dose of calomel should be given, followed by oil, or citrate of magnesia; a blister should be applied over the region of the heart; the diet should be restricted to barley or rice water; the most positive quiet should be maintained; and if the febrile reaction be not subdued by these means, and the strength of the patient admit it, leeches or cups should be applied between the lower angle of the scapula of the left side and the vertebræ. Having by these means subdued the active phlogosis, the patient must be kept in a state of perfect tranquillity of mind and body, and on the most rigid diet, till all symptoms of active inflammation are subdued.

The dropsical effusion and the inflammation of the kidneys may be spoken of under one head, since they are at least intimately associated, and demand the same treatment, even if the former do not generally depend on the latter as the proximate cause, which I believe to be the true pathology of such cases. Where the affection is slight and the febrile reaction mild, a dose of calomel followed by a saline cathartic, will often suffice to subdue the inflammation and arrest the progress of the effusion. Should the skin continue dry and husky, the tongue coated, the pulse quick and corded, great advantage may be expected from the use of the solution of citrate of potash or the effervescing draught with sweet spirits of nitre; and these failing

to give relief, the nitrate of potash with antimony and small doses of calomel may be resorted to. If the fever be high and constant, bleeding will be not only well born, but absolutely requisite. The blood drawn under these circumstances is always much cupped, and covered with a dense buffy coat, and the relief which follows the abstraction of it is very great; I have known the most urgent symptoms yield immediately. The first indication of improvement will be found in the restoration of the healthy action of the kidneys. Should this not take place very shortly, digitalis should be given.

The best form for exhibiting this remedy with reference to its diuretic effect, is, certainly, the infusion, made according to the prescription of Withering, except that sweet spirits of nitre may be substituted for the Tinct. Cinnamomi, with great advantage. You will find the mode of preparation given in the article on digitalis in the Dispensatory of Wood and Bache. The dose must of course be proportioned to the age of the patient. If there be much fever, and the urine be very scant and high colored with deposit of a brown flocculent matter, there can be no room to doubt the presence of active congestion or inflammation of the kidney, which will be best met by the application of leeches or cups to the loins. I have found the perseverance in nitre and diuretic remedies in these cases, without first removing the local inflammation by blood-letting, to aggravate the sufferings of the patient without producing any increase of the secretion.

But of all the manifestations of disease which mark the progress of scarlet fever, none are so much to be dreaded as the cerebral affections which occur at the period now under consideration. By some authors we are taught that meningitis is suddenly developed and proves fatal, either by giving rise to serous effusion, or terminating in the secretion of pus, or lymph. I have never met with cases in which I had reason to suspect the results last mentioned. The serous effusion is comparatively of frequent occurrence, and is sometimes poured out so rapidly as to produce convulsions and death, before the proper means for relief could be applied. In other instances the effusion takes place more gradually, but with an equally fatal tendency.

Some years since, I was attending a young gentleman of about 15 years of age, who was apparently convalescent from

a severe attack of simple scarlet fever. He was an only son, and the object of intense anxiety to his parents. My directions about diet and exposure were carried out with great care; and yet the fever, and suspension of secretion from the skin and kidneys, supervened at the end of the second week. I at once resorted to purgatives and nitrate of potash. On the third day I was summoned to see him lying entirely comatose, with slow pulse, dilated pupils and cool skin. There was no metastasis of the effusion to the brain, for his whole body was œdematous. Recognizing at once the urgency of the case, I tied up his arm and bled him largely, and then put him on the use of small doses of calomel and nitrate of potash, with the infusion of digitalis. At the end of forty-eight hours the kidneys resumed their natural action, and in less than a week the whole train of symptoms had disappeared. These cerebral symptoms depend on the effusion of fluid into the ventricles or at the base of the brain, rather than on any vascular congestion or inflammation of the membranes, and are consequent upon the same causes as those which give rise to the anasarca; and the bleeding acts by curing the condition of the kidneys upon which the whole series of symptoms depends, as well as by withdrawing a portion of the blood, rendered unhealthy by the retention of matters which should have been eliminated by the skin and kidneys.

The next most formidable of the sequelæ is the effusion into the cavity of the pleura, or the parenchyma of the lungs, giving rise to the most distressing orthopnœa. Depending on the same cause as the cerebral cases just noticed, it requires the same treatment which should be pursued with the same degree of energy.

I have never seen a case of dropsical effusion following scarlet fever, which was not materially aggravated by the resort to tonic or stimulating remedies. When the effusion, whether general or local, has been absorbed and discharged through the kidneys, but not till it has entirelydisappeared, it will be proper to resort to the use of some mild tonic; small doses of quinine in the first instance, followed by some of the preparations of iron, with fresh air and a good diet. It must not, however, be forgotten, that the convalescence from these attacks is slow. And that it is even possible that many

months may elapse before the patient is restored to a condition of entire health.

The Rheumatic Fever I have always found yield to properly graduated doses of Dover's powder, or morphia and sweet spirits of nitre. Should the pulse be tense and quick, and the suffering prolonged, bleeding would be appropriate in this case also.

Diarrhœa depends upon the irritation produced by the acrid matter swallowed from the throat, and is most likely to occur after very severe anginose or malignant cases. It is quite possible that ulceration of the mucous membrane may be thus induced, keeping up this unpleasant disease a long time, and retarding the restoration of the strength of the patient. Opiates and mild absorbent remedies are the agents upon which we must rely in such cases, and we shall generally find the disease yield to such applications. I have, however, known the irritation transmitted from the ulcerated membrane to the mesenteric glands, and the patient has died, worn out by profuse discharges and hectic fever, after weeks of suffering.

Case of Constricted Vagina and Occlusion of the Os Uteri. By LAURENCE TURNBULL, M. D.

Mrs. G., æt 39, wife of an estimable farmer, residing at Livonia, New York, came under my care for surgical treatment on the 14th of May, 1851, when the attending physician Dr. J., Clark, related to me the following narrative of the case.

She had passed through most of the exanthematous diseases, suffered for many years with a large thyrocele that eventually disappeared under the use of iodine, and since her eighteenth year had seldom escaped a daily headache accompanied with nausea and frequent vomiting.

After two successful confinements she was seized in labour, on the 15th of April, 1848, at 2 P. M., having been pregnant from the best estimation, 300 days. The labour continued twenty-four hours, and not the least advancement of the head could be perceived; it lay in the greater basin of the pelvis, hard, unyielding, and apparently much too large for engagement. A consultation had been requested and obtained, when exhaustion coming

on, it was resolved to perforate the head, which being done, the occiput soon presented itself at the vulva, and shortly afterwards the body of the child was drawn away, requiring, however, considerable mechanical force.

Upon examination, the child presented many evidences of unusual development; the scalp was abundantly supplied with hair, and ossification of the cranial bones had proceeded so far as to prevent that moulding of them which facilitates parturition, making it very difficult to perform craniotomy.

Inflammation of the pelvic viscera supervened, accompanied with severe fever, and very fetid and scanty lochial discharge; after a protracted illness of six weeks, she recovered sufficiently to engage in her domestic affairs, at which time a sanguineous discharge took place from the vagina. Other than that, she never evacuated any menstrual fluid since her confinement; her catamenia never had any exact periodicity, or fixed quantity, sometimes occurring once in three weeks, at others prolonged; from motives of fastidious delicacy, no vaginal examination was made during her sickness.

She spent the two succeeding years with some degree of comfort, experiencing, however, much difficulty in walking, from a sense of constriction across the anterior portion of the pelvis; her headache and vomiting were exacerbated at irregular intervals; the latter occurred soon after rising in the morning, ejecting a fluid of blue, green, or yellow color, often tinged or mingled with blood.

On the 16th of March, 1850, frequent and difficult micturition appeared, together with pains similar to the expulsive ones of labour originating in the axis of the pelvis, and radiating to the sacrum, lumbar regions and thighs: immediately subsequent to this the whole abdomen became excessively sensitive and tympanitic with high fever, great prostration and pulse ranging from 120 to 150 per minute; these symptoms subsided under the free administration of quinia, tinct. opii, and revellents to the abdomen.

An examination by the rectum at this time, gave nothing but the sensation of a corrugated condensed tissue in front of the intestine; the vagina was constricted to an orifice one line in diameter, situated at the junction of the right rami of the ossa

ischii and pubis; the orifice was at the bottom of a funnel-shaped depression, three-fourths of an inch in depth, and compressed on the right, where it was contiguous to the bone; by using considerable force, and spending several hours in the attempt, the blunt end of a common pocket probe was insinuated full five inches, taking a direction to the right of the promontory of the sacrum; female catheters of a graduated size, were afterwards introduced, and at a still later period, some silver gilt vaginal bougies manufactured by Mr. Warner of this city, and recommended by Prof. C. D. Meigs, who on many occasions kindly advised as to the treatment of the case.

1850, September 14th. By using the bougies the vagina has been nearly restored to its natural dimensions for the distance of three inches from the vulva: (she was unable to wear them constantly and they were therefore applied once a day, or as often as the state of the parts would admit;) at this point is a circular constricting band of a hard and fibrous character, through the centre of which, a common catheter passes freely, and rotates with ease in different directions, giving the impression that there is a free space beyond it; the opening sometimes admits a bougie three-fourths of an inch in diameter, at others the catheter cannot enter. Within the vulva to the left, and partially in front of the vagina, could be felt an oblong, oval, smooth body, visibly occupying all that side of the excavation, occasionally soft, compressible and almost disappearing; again it contracts, bears down upon, and pushes the finger to the right, when introduced into the vagina; this would seem to account for the direction of the probe when first inserted. All attempts to overcome the constriction by dilatation gave immediate relief from the singular sensation in the anterior portion of the pelvis; the instruments when removed were covered with a clear sanguinolent mucus.

By palpation of the bladder when distended, it appears to occupy its natural position, but above the umbilicus can be felt the uterus, five inches or more in diameter at the summit, hard and condensed when the pains come on, soft when they are absent; at first occupying the right lumbar region, it now rests in the mesial line of the body; by ballottement it evidently has a connexion with the tumor in front of, and to the left of the vagina, one being pushed

up the other follows it, and vice versa: fluctuation is perceptible in both.

Tenderness of the abdomen has entirely subsided, but expulsive tenesmic pains recur at regular intervals of three or four weeks, commencing at 7 A. M., disappearing about 12 M., and continuing from one week to three.

At these periods she has no fever, though the circulation is somewhat accelerated, the extremities become cold, and the vomiting is increased, large quantities of muco-gastric fluid being ejected: her gums in the morning are encrusted with a layer of sanguineous sordes, sufficiently thick and tenacious to be removed by the finger, which as it is not the result of scorbutus oris is an anomalous perversion of function. During these attacks she is generally confined to bed with loss of appetite and constipation, though retaining thus far her usual fulness of body; she obviates the constipation by confectio sennæ, and partially allays her pains with tinct. opii.

Sept. 20th, 1850. An important change occurred; the tumor was reduced to nearly one half its former size, attended with severe pain, constitutional prostration, increased emesis, the evacuation of a large quantity of pseudo-membranous substance, from the intestine, also, some pinkish fluid from the vagina; after this, her pains ceased for some time, appetite improved, and she was able to go about the house.

1851, March 8th. The resisting constriction had been broken up, but no os tincæ was discernable by the touch beyond it, and the pain had commenced recurring as before, requiring large doses of laudanum to subdue them; the operation of puncture was proposed by the attending physician, but Professor Meigs considered it a dernier resort, and advised the employment of a sponge tent, which proved exceedingly serviceable in distending the vagina, and making the subsequent operation more easy of performance.

1851, April 21st. The increasing distension of the uterus had caused it to descend and fill the excavation, compress and shorten the vagina, as well as render defecation and micturition very difficult. She was much exhausted, her pains becoming insupportable, even under the daily consumption of f.℥ss. tinct. opii. Life seemed endangered, and some prompt action was re-

quested, and application was therefore made to several medical gentlemen of this city to visit her; I complied with the request, and arrived there on the 14th of May.

Upon the occasion of my visit, she was in bed, suffering little or no pain; her countenance, cheerful, pallid and emaciated, was devoid of any cachectic hue; her nails were aduncated, like those of tuberculous patients, and she occasionally had cough, yet no evidences of pulmonary disease were afforded by physical diagnosis.

The tumor, occupying the umbilical and hypogastric regions, now measured eight inches from its summit to the symphysis pubis, and six inches at its largest diameter; the mucous lining of the vagina appeared healthy, save a small abrasion at its distant extremity; its lateral dimensions were natural; it would, however, admit the speculum only two and seven eighths inches, through which, at the bottom of the canal, were seen two semilunar elevations, three-fourths of an inch long, their long diameter being antero-posterior, and separate from each other about one half of an inch: the intervening space was occupied by a dense and fibrous substance, against which probes were pressed on many points, but no place was found where they would enter; this, on consultation, we determined to make the point of puncture. About an ounce of urine could be retained at once, the catheter, when introduced, taking a direction in front of the tumor, which still remained on the left of the vagina, and could be felt through the rectum.

The bladder and rectum being well evacuated, and a bandage applied, on the succeeding day, the 15th, in company with Dr. Clark and his son, Dr. H. Clark of Philadelphia, and the husband and father of the lady, I thrust in an exploring trocar at the selected place; its entering extremity moved freely in different directions, and some blackish fluid escaped on its removal, when a curved trocar and canula the size of a crow's quill, were next introduced, passing through a resisting tissue one half of an inch in thickness.

On withdrawing the trocar, a thick, ropy, molasses-like, deep hyacynth-red fluid flowed slowly away, and continued to escape, until twenty-seven ounces were collected, the canula being retained in situ for the two following days, during which time much

more was evacuated; the tumor in the abdomen contracted to the size of the uterus after delivery; the one on the left of the vagina disappeared, and that canal elongated itself to nearly its normal extent; she soon became more lively, moved herself with alacrity, partook of supper, and that night enjoyed the most refreshing sleep she had known for many months.

The 18th was about the period of the recurrence of pain, and an interesting chain of phenomena presented themselves; head-ache, vomiting of a green liquid, hurried and oppressed respiration, sibilant ronchus, exquisite sensibility of the hypogastric region, pulse 130, full and soft, the uterus increasing in size, but without an antecedent chill; calomel, opium and neutral mixture, with sinapisms, and opiate cataplasms to the abdomen, were ordered, and at evening the symptoms had lessened in intensity, to reappear on the next day, but with diminished severity.

During this time the puncture had been kept patulous by the occasional introduction of a Simpson's sound, the end of which moved freely as if in a large quantity of fluid, but none made its escape after taking it away.

May 20th.—This morning she appeared quite at ease, though still in bed. Left her, on my departure for Philadelphia, in the hands of Dr. Clark, who has kindly furnished the following notes:—

"21st.—Fell into syncope at 10, A. M., but soon revived; tenderness of the abdomen diminished; appetite improved and sleeps well; quinia and brandy administered freely, and Tr. Opii M. xxv. given occasionally.

"22d.—Pulse 100—this rate has become almost habitual; no pain, and feels vigorous; sound passed with no resistance, but after taking it away a large quantity of fluid escaped of less consistence than the former, with an intolerable odor of sulphuretted hydrogen.

"23d.—Fluid commenced flowing per se at 3, P. M., having ceased during the preceding night; abdomen flaccid without soreness, and a marked sensation of relief in both iliac regions; occasional colicky pains.

"24th.—Four napkins saturated with the fluid, alternately consistent and limpid, but retaining the nauseous odor; she is loud

in her exclamations of relief; enjoys the free expansion of her lungs and is full of vivacity. Quinia and brandy still continued, with Tr. Opii, p. r. n.

24th, Evening.—Discharge continued without interval: less odor; soreness in the region of uterus and right ovarium; tumor in the right iliac region; pulse 92, tongue coated, bowels free, little perspiration, no fever, appetite indifferent; Tinct. Opii., M. xxv., night and morning.

25th. Two attacks of emesis after leaving her yesterday; vagina syringed with a solution of castile soap and mucilage: large discharge with occasional grumous clots of very dark color and offensive odor yesterday afternoon; none since 6 P. M. yesterday; tumor in right iliac region the size of a goose egg and very sensitive; pulse 100 appetite variable; slept well the preceding night.

26th, 11 A. M. Free evacuation from the bowels accompanied with pain; refreshing sleep last night: free discharge from the uterus of a blackish color resembling the dregs on a laudanaum filter, and bad odor: increased fulness and tenderness in the hypogastric and iliac regions; pulse 90; copious perspiration; appetite bad. Treatment: Quinia gr. ss., every two hours; Brandy and Tinct. Opii. occasionally; ointments of Sugar of Lead and Opium locally.

28th. Improved in all respects; pulse 88 and soft; tongue nearly clean, slept well last night; perspiration free, appetite improved, feels more vigorous; bowels free and discharge continues. Treatment same as before.

28th, 5 P. M. Passed the day quietly; three evacuations from the bowels attended with pain: vaginal discharges of less odor and consistence; diminished abdominal tenderness; appetite the same; pulse from 80 to 90.

29th. Patient expressed herself better than any day since the operation; tumor smaller; tenderness and tension of the abdomen subsided; emplast. belladonnæ to the hypogastric region; pulse 90: strength, appetite, &c., improving, while the disharge continues with odor like that of an accouchée. M. xxv. Tinct. Opii.

30th. No change from yesterday.

June 2d. Patient sent for me: was very weak: pulse 132, the

previous night a restless one; severe pain in both iliac regions, not relieved until she had taken Tinct. Opii. f℥ii; discharge watery and offensive: vomiting recurred; bowels confined, tongue coated, no appetite and thirsty. Quiniæ Sulph. gr. ss. every three hours. Brandy occasionally.

3d. 5 P. M. Requested to visit the patient at 1 A. M. Very feeble, pulse scarcely perceptible: Quinia gr. ss. every hour; brandy liberally: chickenbroth tablespoonful every half hour: at this time much more comfortable, pulse 120, bowels confined, urine high colored, perspiration copious, less tenderness and occasional vomiting. Opiate cataplasms to the abdomen; sound passed readily: after its removal two three ounces of a cineritious colored fluid flowed away: it was extremely offensive; administered two injections of f℥iv. each of tepid water; gas escaped from the uterus with a hissing noise followed soon by a loud report, then fluid with a gurgling sound having the appearance of soap suds.

4th, 4 P. M. Rested well last night, no pain or soreness since the injection; a stool after three enemata; urine natural and freely evacuated: nothing from the uterus since the washing out; pulse 110, full and soft; breathing natural, perspiration free, tongue clean at tip and edges, no appetite, some thirst, stronger, vomited several times; abdomen tympanitic, relieved by enemata of vinegar and water.

June 5th, 6 P. M. Saw the patient this morning; passed the night pleasantly; pulse 100, perspiration less profuse, abdomen less tympanitic and less tender, bowels confined. Prescribed Hyd. Chlorid. Mit., gr. iv, enemata if requisite, and alcoholic lotions; she has been quiet through the day, vomited several times fluid of a green color: two enemata administered followed by two natural evacuations; no discharge from the uterus; urine of natural appearance and quantity, pulse 120, white incrustation on the roof of the mouth; os of healthy appearance, bile just escaped per anum; Quinia gr. ss. every hour, brandy occasionally; Tinct. Opii. gt. xxv, twice a day.

6th. Little sleep last night; frequent vomiting of green fluid changed this morning to brown color similar to that thrown off at previous times; countenance haggard, apthous incrustation of the palate and fauces; membrane beneath of a dark mahogany

hue; pulse small and frequent; extremities cold, inclination to profuse perspiration; bowels slightly opened, healthy bile evacuated; urine passes freely and of natural color; tongue less coated, no appetite or pain; less tumefaction of the abdomen; slight tenderness in the left iliac region; no discharge from the uterus, and no odor in the room. Decoction of tansy to the abdomen for the last twenty-four hours; the pain, a stimulus to which she has been accustomed, being gone, nothing appears adequate to the task of rallying the worn out energies of the system; 3 P. M., these notes close with the patient's life; I have no remarks to make other, than that I wish the operation had been performed six months earlier."

I regret exceedingly that Dr. Clark made no post-mortem examination, but the practical deductions to be drawn from the case are the following:

That, in all cases of instrumental delivery where sloughing occurs, great care should be exercised in keeping the parts dilated, by means of bougies, and daily examinations should take place, so as to break up irregular contractions. In this case, nearly two years were allowed to elapse, and the menstrual fluid accumulated; the watery particles passing away, there was left a concentrated fluid, a portion of which may have escaped into the cavity of the peritoneum, through the fallopian tubes, there causing acute inflammation, which is probable from the symptoms, on the 16th of March, 1850.

It has been found by the most recent observers, that when the womb is dilated by fluid within its cavity, the fallopian tubes are patulous, and therefore, when severe contractions occurred, a portion of the fluid might readily escape in that way.

In most cases where this operation has been recorded, it was performed soon after the accumulation occurred, and not left until the powers of the system were weakened by long continued suffering, and the patient unable to perform the functions so important to health.

Locust street, Philadelphia, October, 1851.

Remarks upon Medicinal Inhalation, and its applicability as a remedial agent, for the prevention and cure of Consumption, Bronchitis, and other diseases of the Respiratory Organs. By Edward Jenner Coxe, M. D., of New Orleans.

By Medicinal Inhalation, is to be understood the inspiration of air, impregnated with the active principle of medicines, calculated to produce a local remedial effect upon that part of the mucous membrane of the respiratory organs which may be in a morbid condition, and, indirectly through it, upon those diseases implicating other portions of the lungs.

To accomplish this object in a perfect manner, two modes may be employed.

One, by causing the patient to breathe in a close room, the vapors or fumes of such medicines as may be considered appropriate to the existing disease. This is readily accomplished by placing the proper solid or fluid medicine in a vessel over a few live coals, or a lamp; an ordinary nursery lamp will admirably answer the purpose.

The other, and most efficient mode, is by means of a properly constructed inhaler, consisting of a vessel of glass, or other material, with a tightly fitting top, and two tubes, one, extending internally from the upper surface of the cover to within half an inch of the bottom, the other extending from the under surface of the cover, six or more inches in length. Through this external tube, furnished with a mouth-piece, inspiration or inhalation is to be carried on, and expiration through the nostrils. The medicinal fluid being poured into the inhaler, inhalation is effected by drawing into the lungs, through the external tube, the air contained in the inhaler over the surface of the fluid. The air thus inhaled, has its place, naturally supplied from the external air by the inner tube, and passing through the medicinal fluid, is impregnated with the active principle of the medicines employed.

Such is medicinal inhalation, and as the process can be continued as long and as frequently as may be desired or ordered, it follows necessarily, that if the air does extract the medicinal properties of the articles employed, these must be applied to every

portion of the mucous membrane of the air tubes, thus exerting a decided curative force.

That this effect does result, cannot admit of a doubt, and requires no reference to the numerous facts and experiments easily adduced in proof of it. The only debateable point is the selection of the appropriate remedy, or combination of remedies known, when thus applied, to exert a curative influence. By means of the inhaler thus described, the following are some of the remedies used, resulting in alleviating or curing diseases, that have proved incurable by the ordinary modes of treatment: Balsam copaiva, creosote, tar, naptha, turpentine, cyanuret of potash, iodine, iodide of potash, assafœtida, camphor, the various narcotic extracts and tinctures; tannin, galls, cayenne, in decoction and tincture, tincture of iodide of iron, the infusion or decoction of different tonics, and astringent vegetables, &c.

This manner of employing medicinal inhalation originated with Dr. Mudge, an English physician, who published a work on the subject in 1799, in which is delineated and described a correct inhaler as above.

Until the last fifteen years, the inhaler used in the United States, though called by his name, resembled the original only in external appearance, wanting the most important part, the internal tube, to allow the passage of the external air through the medicinal fluid contained in the inhaler. This fact offers a sufficient explanation of the disappointment resulting from the employment of that misnamed inhaler, or its usual substitute, a common tea-pot. If the top of this inhaler or tea-pot be tightly fitted, it is manifestly impossible to inhale more than the limited quantity of air existing over the surface of the fluid in the inhaler; and if the top does not fit it accurately, it is equally evident that the air inspired can only be that entering from without, to supply the place of that inspired, but not passing through the medicinal fluid. In either case, it is clear, that the air not passing through the fluid, cannot contain a particle of medicinal power. Inhalation thus practised, certainly does not deserve to be noticed by those, who, in their practical works allude to medical inhalation as a means of cure or alleviation.

The reason of my personal and practical interest in this va-

luable remedial agent, proceeds from the fact of my having suffered for many years from a severe and constant disease of the larynx, attended by pain, hoarseness, and at times total loss of voice, and copious muco-purulent expectoration. Deriving no permanent benefit from eminent physicians of Philadelphia, or of Trousseau and others of Paris, and finding a long continued rigid system of diet, frequent leeching, cupping, bleeding, blisters, tartar emetic ointment, setons in the throat and breast, a winter's residence in the island of Madeira, and three years in Nice and other parts of the South of Europe, unable to effect a cure, I fortunately resorted to medicinal inhalation, properly so called, which succeeeded most perfectly. It may not be amiss to state, that I had previously given a most ample and long continued trial to the incorrect mode of inhalation which had been recommended, without the slightest benefit.

In consideration of these facts, would it not be strange, did I not in a decided manner assert, that medicinal inhalation does possess curative powers, and believe that the result of my experience in many cases besides my own, will not be without some weight with the profession, in reference to its intrinsic value?

A strong argument in favor of a more general and perfect trial of medicinal inhalation, is deduced from the consideration of two well established facts in reference to those prevalent and fatal diseases, consumption, bronchitis, and laryngitis, for which it is recommended as a means of prevention and cure.

The first is, that the diagnosis of the healthy or morbid condition of the respiratory organs, is at present more readily and certainly ascertained than before the discovery of the immortal Laennec.

The second, that notwithstanding this advance, the possibility of effecting a cure in confirmed cases of the above diseases, is by many considered problematical, or at least, of exceedingly rare occurrence.

The statistics of our country and Europe, prove the generally fatal termination of those diseases, regardless of the stereotyped system of treatment so pertinaciously persisted in. In the exceptional cases, where a cure does result, it may be questioned whether such is due to the medical treatment strictly speaking,

with the exception of that part, having a tendency to maintain and increase the general strength, thereby enabling the restorative power of nature to heal by her own laws, those morbid conditions, depending upon many general causes, and requiring the aid of hygienic, rather than medical treatment. Numerous authorities could be cited to prove that the commencement of many diseases for which medicinal inhalation is particularly proposed, depends upon a morbid or depraved condition of the system, either hereditary, or resulting from the combined influence of poor living, impure air, and a total disregard of common sense in respect to clothing, exercise, or diet, finally localizing itself upon the important pulmonary organs, thus undermining the main springs of health, and rendering, after a time, all efforts to arrest its progress of no avail. It necessarily follows, if we are to hope for improvement in the treatment and termination of the diseases alluded to, that we must not wait until we have presented all the symptoms indicating the firm hold upon the organs, but rather watch for the forming germ, and adopt hygienic and other measures, to arrest and overcome the morbid predisposition, and force or coax nature to repair the evils resulting from a combination of causes, favorable to the rise and progress of an almost incurable disease. As one of the means, well calculated to aid in the accomplishment of so desirable an end, by giving vigor to the pulmonary organs, and others connected with them, I have no hesitation in assigning a very prominent place to medicinal inhalation.

In pursuing the consideration of this curative agent, it is necessary to enquire into its mode of action, which I regard as twofold. The one, altogether mechanical, consisting in the gradually increased expansion of the lungs, by drawing a large volume of air into them, allowing them to remain in this expanded state for as long a time as can be endured without pain or uneasiness, and finally permitting the air to be expired slowly through a valvular opening of the lips, a small reed, or quill, or one of the many breathing tubes made for that purpose, though in no respect superior to the other modes. By repeating this process more or less frequently, during the day, for fifteen or twenty minutes each time, we have an increase of size, or capacity and strength, and as an effect, a permanent enlargement and

strength of the thorax, an increased action of the heart, with a more perfect distribution of the blood to all parts of the system.

The second consists in the remedial and curative power exerted by the local application of the vapor or fumes of such remedies as may be indicated by the symptoms of each case, and the stage of the disease.

By the correct adaptation of remedies to the existing disease, we can produce positive effects, similar, and often superior, to those resulting from the internal exhibition of medicines, with the advantage of not harassing the stomach and bowels.

If successful in establishing what may correctly be attributed to the local application of remedies, may it not be expected, that inhalation will be more generally brought into notice, its claims upon the profession more clearly defined, and the proper manner of using it, as well as the medicines to be employed, more specifically laid down for the guidance of those who may desire to benefit others by its employment?

In endeavoring to place medicinal inhalation upon its proper basis, let it not be supposed that impossibilities can be effected, by restoring to perfect health those already at the verge of the grave. Let it rather be regarded as a remedy to be employed at the forming stage of the disease, or, in those cases where such may be apprehended, to impart vigor to the thoracic organs, and thus arrest the progress of morbid action.

An occasional trial will not suffice to decide as to the actual value of this remedial agent; time, perseverance, and a long continued series of observations are indispensable. The end to be attained is certainly deserving of our most strenuous exertions. In the following observations and conclusions of those who have recorded their experience, it will be seen, that some allude to the mechanical action of inhalation, others to the curative effects resulting from the different medicines employed. Dr. A. T. Thompson says, "There is one description of exercise too little attended to, but which is nevertheless, of great importance in warding off pulmonary diseases, namely, the exercise of the chest. Nothing is more essential for the preservation of health, than the full expansion of the lungs, so as to maintain the free passage of the air to the minutest tubes and all the air cells, to promote the pulmonary circulation, and to favor that complete change in the blood, for which the respiratory motion is intended." Dr.

Tweedie says, "Changes of structure in the bronchial tubes, are most commonly the result of inflammation, or of some kindred modification of the nutritive process. Frequent recurrence, or long continuance of inflammation of the bronchial membranes, as in other structures, changes their condition, and the mechanical forces to which they are subjected in the junction of respiration, may variously modify this change. Inasmuch as these lesions seem to arise from continued inflammation, it becomes of the more importance to direct remedies against those forms of bronchitis, that are habitual, or frequently recurring. An imperfectly cured cough will often harass a patient for months, and even for years. In process of time, the breathing becomes permanently shortened, and an irritation is often fixed in some of the tubes, manifesting its effects on their secreting function by habitual expectoration, generally thin and mucous, sometimes muco-purulent. There is one point with regard to treatment particularly suggested by a knowledge of this change of structure—that, not only should the practitioner persevere in the use of the means which tend to eradicate the low degrees of inflammation that produce it, but he also should endeavor to countervail, by mechanical means, that mechanical limitation, which this change induces in the size of the tubes. If the patient use no exertions, and give his lungs little play, any increase in the rigidity of the tubes will more readily fix them in their present contracted state; but if he take moderate exercise, increased as habit improves his power, the lungs will be kept in that free mobile condition that is least favorable to rigidity or deposition of any kind. Probably, special efforts of inhalation would be useful with the same view, and, as this might be combined with some mildly stimulating vapor, such as that of water impregnated with tar, or camphor, it might also be serviceable in improving the secreting properties of the membrane."

Dr. Good, observes, "A moderate use of the vocal organs, as of any other, tends to strengthen them, and to enable public speakers, singers, and performers on wind instruments, to go through great exertion, without inconvenience, which would be extremely fatiguing to those who are but little practised in any of these branches; but the labor is often carried too far, and the lungs become habitually irritated, and hæmoptysis succeeds.

The organs of respiration, like those of every other kind, derive strength instead of weakness, from a temperate use of them."

Says the eminent Professor Rush, "Those persons who have been early instructed in vocal music, and who use their vocal organs moderately through life, are seldom affected by a hæmorrhage from the lungs. Lawyers, players, public criers, and city watchmen, all of whom exercise their lungs either by long or loud speaking, are less affected by this disease than persons of other occupations. The lungs, when debilitated, derive equal benefit with the limbs, or other parts of the body, from moderate exercise."

Dr. Mudge says, "The two great indications, of preventing an increased irritation by the cough, on the inflamed parts, and removing inflammation itself, by such emollient applications as could most conveniently be applied to them, are thoroughly answered by opium, and the inhaling warm steams into the lungs, and the fact is past dispute, that the conjoined powers of those agencies are a sure, and, in general, an immediate cure."

Van Swieten remarks, "It is certain that steam and vapors drawn in with the air in respiration may be of use, as they everywhere come in contact with the whole aerial cavity of the lnngs, and thus various remedies may be applied, according to the various conditions of the ulcer."

Dr. Baillie says: "In quinsy, should leeching and other treatment not materially lessen the inflammation of the tonsils, and velum palati, the progress of the inflammation should be encouraged by inhaling the vapors of boiling water and vinegar, as, by this means, the disease goes more quickly through its process, and the patient suffers less."

Dr. Pringle remarks: "I have likewise observed good effects from making the patient breathe over the steam of hot water, a practice recommended by Bœrhaave and Van Swieten, and confirmed to me by the repeated trials of Dr. Huck, who found it more beneficial when the phlegm was viscid, as well as more grateful to the patient by adding a small portion of vinegar."

Dr. Rush says in a note to the above: "Too much cannot be said in favor of this simple and powerful remedy; the editor has seen patients snatched from the jaws of death by it."

Dr. Crichton, after giving cases in which fumigations of tar

had been used, remarks: "It must be evident from the preceding cases that the tar fumigations, though completely successful in some of them, did not produce the same good in all, but on the other hand, the very great relief which every patient has experienced at first from it, particularly in the diminution of cough, expectoration, and hectic fever, is a fact which ought to encourage us to multiply the trials of this remedy as far as possible."

Delpit observes: "If any species of consumption exists in which simple or compound fumigations become useful, it is certainly in that of the larynx, more accessible and susceptible to their influence."

Mascagni says: "If an efficient remedy for diseases of the lungs is ever discovered, it will be one that can be applied by inhalation."

Dr. Thomas relates a case of hooping cough of three weeks' standing, cured in ten days, by confining the patient in a room, and causing him to inhale the fumes given out by adding gradually half an ounce of powdered nitrate of potash, to half an ounce of sulphuric acid in a tea-cup.

Dr. Pearson found the vapor of ether very serviceable in cases of consumption, and that, in some cases, combined with musk, camphor, opium, assafœtida, and similar articles, it appeared to possess greater power.

Dr. Ramadge lays great stress upon the advantages resulting from the free use of inhalation through a long tube, which is altogether mechanical in its action. He says: "Inhalation performed two or three times daily, for half an hour each time, will, in the short space of a few weeks, work a wonderful change on the chest externally; the muscles concerned in respiration will be manifestly enlarged, and the bony compages of the chest visibly increased, whilst, at the same time, the natural respiratory murmur will be heard far more distinctly than ever."

Dr. Elliotson says: "I have made many phthisical patients breathe for four or five minutes, four or five times a day, through a mixture of creasote with mucilage and water, but with no further effect, in general, than occasionally an increased facility of respiration, and a diminution of the cough and expectoration. Some, it always appears to irritate, and all in whom any degree

of inflammation exists. I am satisfied it is no remedy for tubercles. Where, however, only a single ulcer, or but a small number, exist in the lungs, and there is no disposition to further tubercular formation, it is very beneficial. In bronchorrhœa, or that state of the bronchial mucous membrane which consists in a profuse secretion without inflammation, I have seen its inhalation of essential service, and in one instance of this affection in which the expectoration was extremely offensive, the cure was very rapid. In asthma, also, dependent upon morbid excitability of the bronchial membrane, its inhalation is often useful."

In chronic affections of the fauces, larynx, trachea, and bronchi, I have frequently employed creosote by inhalation, generally combined with other medicines, with marked benefit, and while the testimony of Dr. E. is decidedly favorable to its use, it clearly shows the necessity of discrimination in the selection of remedies, no less than attention to the existing stage of the disease.

Dr. Mackintosh remarks: "The inhalation of hot vapors will be found very serviceable in croup, and in chronic complicated cases of bronchitis, service may be expected from the inhalation of tar vapor. In scarlet fever, when the throat is much affected, inhaling the vapor of warm water affords more ease than any argle."

Dr. Eberle says: "The inhalation of aëriform fluids may be employed to great advantage in the treatment of pulmonic affections. In this way we are enabled to make direct impressions on the respiratory organs, a circumstance which experience has shown to be of much consequence in many of the diseases to which these organs are liable. In catarrhal affections, attended with painful and difficult expectoration, much benefit may generally be obtained from the inhalation of the steam of hot water, or of vinegar and water. This acts as an emollient and soothing application to the tender and inflamed vessels of the internal surface of the bronchial tubes.

In Pneumonia, after the violence of the arterial excitement has been reduced by depletory measures, the inhalation of the steam of hot water, or decoctions of emollient herbs, will often contribute much to the support of an easy and regular expecto-

ration. In no affection, however, are inhalations of this kind more decidedly beneficial than in the paroxysms of asthma. Inhalations of warm water and vinegar are often very serviceable in cynanche tonsillaris and trachealis. The inhalation of ethereal vapors is a remedy of very considerable value in certain affections of the respiratory organs. In dyspnœa, depending on a spasmodic condition of the pulmonary system, I have frequently derived very great benefit from the inhalation of the vapors of sulphuric ether. In two cases of hooping cough that had been mismanaged during the early period of the disease, and in which the expectoration had assumed a purulent appearance, I have derived decided benefit from tar fumigations. This remedy has also been found very useful in asthmatic affections. In acute inflammatory diseases of the lungs, however, it cannot be employed without doing mischief. The inhalation of the tar fumes appears to be particularly beneficial in chronic bronchitis, or in that form of pulmonary consumption which depends on chronic inflammation of the mucous membrane of the bronchi."

Dr. Thomas observes: "To moderate the severity of the paroxysms in asthma, we cannot employ a more powerful and efficacious means of relief than the inhalation of steam frequently from an inhalator; an infusion of chamomile flowers, with the addition of a little ether, may be used on the occasion."

Sir C. Scudamore remarks, "Much professional scepticism appears to be entertained concerning the possibility of affording any material relief in cases of consumption. This I must condemn. It is I conceive less adverse to the interest of science than of humanity, to consider any disease as absolutely incurable. Our art is doubtless bounded by certain limits, but let not these limits be still further circumscribed by our own supineness and prejudices. It has often happened, that valuable remedies have been laid aside or neglected, in consequence of some mismanagement in their use, or perhaps, from an excessive zeal in the recommendation of them by their authors, so that not being found capable of producing the promised effects, they have experienced the unmerited fate of being rejected as useless.

"Some of the medicines which I have recommended for inhalation are agents of much delicacy and power. My conviction

of their most perfect safety employed in this manner, has not been shaken by a single untoward instance, but it is right to state, that their administration requires careful attention and management. The composition of an inhaling mixture, and the doses to be used, are to be adapted to the particular case, and changed according to its varying circumstances, in the same manner as we find it necessary and proper to alter and accommodate our treatment with internal medicines.

In consumption, even in desperate circumstances, I recommend the use of inhalation, as being calculated more than any other treatment to mitigate the most troublesome symptoms, and afford the patient great comfort and relief; also, I am persuaded, that such treatment affords the strongest chance of cure. Before the disease has made much destructive progress, and especially in the very early stage of phthisis, I have the highest opinion of the efficacy of the treatment. But I desire to repeat what I have before said, that internal treatment and general management should be joined with the plan of inhalations. I have occasionally, as shown in some of the cases which I have related, found the pulmonary or bronchial disease in so great a degree local, that I have chiefly or wholly trusted to the use of inhalations, and with success; but these are exceptions to the general rule. In chronic bronchitis, the benefits of inhalation are too well proved by the speedy favorable alteration produced both in the quantity and quality of the expectoration, and by the sensible relief which is experienced by the patient, that no question of the value of the remedy can be entertained. It gives relief to the asthmatic patient, proves often curable in cases of consumption, not become desperate in their nature, and is capable of much useful influence even in those extreme examples of the disease which too probably admit only of alleviation, and seem to bid defiance to the ordinary rules of practice."

Dr. Corrigan says, "Of the powerful influence which various vapors and even changes in the air itself exercise as local agents on the lungs there cannot be a doubt; every day's observation shows it; every one in his own person feels it. Even allowing most fully for the exaggerated encomiums of some of the older advocates of inhalation, enough remains in the attestations of such men as Darwin, Beddoes, Withering and their contempora-

ries, to forbid us to abandon this plan of treatment. I think these few observations justify me in coming to the conclusion, that remedies in the form of vapor exert a powerful influence over diseased action; and that, as it is only in this form we can ever administer remedies to act locally upon diseased tissues in the lungs, their exhibition in this form merits close attention and further perseverance."

In the Boston Medical Journal for January 1851, Dr. Cornell observes in an article on inhalations, that, following a plan of Dr. Chambers of London, he has employed the inhalation of fine powders with advantage in diseases of the air passages. The powder to be used is prepared by soaking lycopodium or club-moss in a saturated solution of nitrate of silver, then drying and reducing to a very fine powder. It is applied by placing the tubular end of a glass funnel in the mouth, and simultaneously with a deep inspiration the powder is dusted into the large end, whereby it is diffused over the back part of the throat, a portion at times entering the larynx. This must be regarded as a modification of the plan of insufflation, proposed and practised many years since by Trousseau of Paris.

After having, by his advice, tried most fairly this plan for a long time on myself, without deriving any permanent benefit, and having been three times, from its perfect application and entrance into the larynx, on the point of suffocation, I was forced to abandon its further use, satisfied that no little damage attended, provided the entrance of the powder into the larynx was desired. If this is not, I am perfectly convinced from repeated trials, that the insufflation of the powder is in no respect equal in power or general utility, to the strong solution of nitrate of silver, as recommended and applied by Dr. Green of New York.

In reference to the introduction into the larynx of a strong solution of caustic, while according to Dr. Green the entire merit of so valuable an innovation, and equally convinced in many cases of its great and peculiar value, I feel obliged to remark that, in the majority of cases of diseases of the throat, the introduction into the larynx of the sponge saturated with the caustic, will not be found of absolute necessity; cases are of frequent occurrence in which, by the application of the strong solution to the back and lower parts of the fauces, diseases of

the throat have been perfectly cured, after the failure of all other modes of treatment, except that by inhalation, which had never been resorted to. By means of the strong solution of caustic, in conjunction with medicinal, inhalation, many cases of disease, incurable by other resources will be found perfectly manageable.

Dr. Cornell alludes, in terms of commendation, to another mode of using the nitrate of silver, by imbibing from the mouth of a tea-pot, the vapor arising from a solution of forty-eight grains of nitrate of silver, in eight ounces of boiling water.

To determine the possibility of producing any effect from the local application of caustic, by this, or the proper mode of inhalation, I instituted the two following experiments, using every precaution to make them correct:

After making an inhaler of glass, I poured into it two ounces of distilled water, and fifty grains of the crystallized salt, and when thoroughly dissolved, continued for ten minutes the inhalation, causing the air expired to pass into a solution of common salt. Neither on the palate nor in the solution was the slightest impression made, or effect produced.

To render the matter still more conclusive, I distilled by a glass retort, six ounces of water, and dissolving in this sixty grains of the crystals, I again distilled five ounces from this strong solution, and by testing this in various ways, it was conlusively shown that not a particle of the silver was present, and that, consequently, that mode of employing the caustic was utterly useless.

Although no additional proof was required, I swallowed three ounces of this water, without perceiving any effect as might be supposed. Firmly convinced of the efficacy of medicinal inhalation, properly performed, as a preventive and curative agent, it is to be hoped that it will be more generally resorted to, more systematically and correctly performed, and that the apathy manifested by the majority of the profession in its practical application, will yield to a determination to pursue the subject with an enthusiasm worthy of the object to be attained.

The following remarks of Sir C. Scudamore may appropriately conclude the subject: "It may be laid down as a principle, that inhalation should always be so conducted as not to produce fa-

tigue to the patient in any way, either as regards the composition of the mixture, its strength, or the period of carrying on the process."

Microscopical Observations of Tumors. By JOHN H. BRINTON, of Philadelphia.

It is only since a comparatively recent period, that the microscope has been made applicable to the study of morbid growths, and although many observations have been made, and a number of excellent works published on this subject upon the continent of Europe, still it cannot yet be said, that the morphological arrangements of tumors, more especially of those which are classed under the general term malignant, have been sufficiently elucidated. The diagnosis of such growths has ever been an object of much study and interest to the Surgeon, and any means which can assist his diagnosis, or verify it subsequent to operation, deserve his most careful consideration. Is not the microscope subservient to this most important end? Inasmuch as this subject is beginning now to occupy the minds of the profession generally throughout this country, I shall make no apology for adding the records of the comparatively few cases I have had the opportunity of examining, to the general stock of information, in the certain expectation that at no distant day, the careful and continued investigation of this subject will be attended with results highly important, not only to pathologists generally, but more especially to the practical surgeon.

G. B., æt. 60 years, presented himself at the Surgical Clinic of Jefferson Medical College, complaining of hæmorrhoids. He stated that he had lost large quantities of blood, and was desirous of having the tumor removed. This was accordingly done by Prof. Pancoast, in the latter part of September, before the class. Ligatures were passed through the pedicle of the tumor, which was strangulated, and then removed.

The tumor was about the size of a small orange, soft to the touch, crushing down under the fingers, and very vascular. It had occupied only four weeks in attaining to its present size. The mucous membrane of the rectum, at the point at which the pedicle of the tumor was attached, felt hard to the touch, and scirrhous in its character.

Fig. 1.

(*a*) Cancer cells of various shapes and sizes, magnified 220 diameters showing single and double nuclei, and also granular matter.

(*b*) Arrangement of cells in layers.

(*c*) Action of acetic acid on cells.

Judging from external appearances, the tumor was apparently malignant, and its probable return was stated to the class. Upon squeezing out a little of the fluid of the tumor, and submitting it to the microscope, I found it to contain many cancer cells of different forms, oval, heart-shaped, elongated and round, the oval cells being most numerous, and the round least so. (Fig. 1, *a*.) The cells varied in size from the 1-1000th to the 1-2200th part of an inch in diameter, presenting a clear distinct outline; all were possessed of nuclei and nucleoli, and, in many cells, I found two nuclei. These nuclei were about the 1-4000th part of an inch in diameter. The interspace between the nucleus and the cell wall was filled with granular matter. Many molecules and granules were to be seen floating among the cells, but I did not observe the compound granular cell described by Bennett. Upon placing a portion of the more solid part of the tumor under the field of the microscope, the same appearance of the cells and of the granular matter was observed. The arrangement, however, of the cells was very peculiar and beautiful. They were enclosed in a net work of fibrous tissue, of extreme delicacy. (Fig. 1, *b*.) This tissue did not, as we often find it, enclose the cells in cysts,

but in layers, one upon another. The addition of acetic acid rendered the cell wall transparent, but did not dissolve it, this is proved by the fact that if we drop iodine on the specimen, the cell is instantly colored, and the cell wall brought out definitely. The microscopical character of this tumor was the same as that usually presented by encephaloid.

I have used the term cancer cell, not meaning, however, to assert that we must consider any one form of cell as certainly and alone characteristic; indeed, in this very case we have seen several different forms of the cancer cell. That these different forms are, however, only modifications, is admitted by Bennett and insisted upon by Lebert, who, in his "Practical treatise on cancerous maladies, and on curable affections which may be confounded with cancer," published but two or three months since, says: "The type of the cancer cell is a small regular sphere with an elliptical nucleus, occupying about half of the interior of the cell, and containing one or more nucleoli, but that type is not often pure. The cellular envelope takes the ovoid, triangular heart and caudate shape. . . . . .
It would be useless to recount here all the shapes assumed by the cancer cell, it is sufficient to remark that in no other cell do we observe this *multiformity* of the cell wall to the same degree. . . . . The nucleus is, as we have already seen, the constant element of the cancer cell."

CASE II.

At figure 2, I have represented the microscopic appearance of a fibrous tumor, removed during the month of August last. It is an interesting specimen, inasmuch as we have here shown the formation of fibres. The tumor occurred in a patient about 60 years of age, and was situated upon the plantar fascia. It had existed as a small, hard, button-like body, for many years; but it was not until a short time prior to its removal, that it occasioned any inconvenience; it then began to enlarge rapidly, and attained nearly the size of a walnut. The tumor was closely adherent to the skin, which was with difficulty dissected off, and appeared to be of unusual thickness. Upon making a thin section of the tumor, which is best done by the use of Valentin's double-bladed knife, and placing it under the field of the microscope, the true character of the growth became apparent. It

was observed to consist of a fibrous tissue, or rather of bands of tissue; the bands, in some instances running side by side, in a wavy manner; and in others interlacing one with another. The fibres, where separated by the use of the needle, appeared to partake of the character of yellow fibrous, or elastic tissue, forming loops. (Fig. 2, *c*.) Here and there might be seen the fusiform corpuscles described by Bennett and Lebert, which were composed of a simple nucleus, with two caudated extremities, the nucleus being about the 1-3000th part of an inch in diameter. These fusiform corpuscles, by their juxtaposition, evidently went to the formation of fibres.

Fig. 2.

(*a*) Fusiform corpuscles forming fibres, magnified 220 diameters.
(*b*) Fat cells and oil globules.
(*c*) Yellow fibrous tissue, forming loops.

Fat vesicles, and free fat globules were to be found in abundance throughout the whole tumor. (*b*.)

The fusiform corpuscle, the caudate cancer cell of the older microscopists, has given rise at different times to much dispute; although at one period considered to be characteristic of cancer.

It has since been shown that we must expect to find it in all growths where fibrous tissue is at all involved. It is owing to this circumstance that in scirrhus we almost always have it, and we often detect it going to the formation of the reticulum of encephaloid, but no dependence can be placed on its presence as a mark of malignant growth.

BIBLIOGRAPHICAL NOTICES.

A Dictionary of Medical Science, containing a concise explanation of the various subjects and terms of Physiology, Pathology, Hygiene, Therapeutics, Pharmacology, Obstetrics, Medical Jurisprudence, &c., with the French and other Synonymes; Notices of Climate, and of celebrated Mineral Waters; Formulæ for various Officinal, Empirical and Dietetic preparations, &c. By ROBLEY DUNGLISON, M. D., Professor of the Institutes of Medicine in Jefferson Medical College, Philadelphia. *Eighth Edition, revised and greatly enlarged.* Philadelphia, Blanchard & Lea, 1851.

In the present edition of this popular work, the author has included *four thousand terms* not found in the last, and *has* made it, "not only a satisfactory and desirable," but "indispensable lexicon," in which the student may find every term now legitimated in the nomenclature of Medical Science. It is the most enduring monument to his industry and research.

Surgical Anatomy. By JOSEPH MACLISE, Surgeon. With sixty-eight colored Plates. Philadelphia, Blanchard & Lea, 1851.

Part V. and last of this admirable reprint, has just been issued by Messrs. Blanchard & Lea, and is now offered to the professional public.

In notices of the previous parts, we have called attention to the excellence of this work, and have recommended it to the

student of medicine, and practitioner, removed from the schools, as presenting a truthful series of dissections demonstrative of the relative anatomy of the principal region of the human body. From this candid expression, the present part does not incline us to swerve; it fully equals its prédecessors in beauty and faithfulness of execution. It contains the conclusion of the demonstration of the urinary organs, and comprises in plates 63 and 64, deformities of the urinary bladder, the operations of sounding for stone, of catheterism, and of puncturing the bladder above the pubes.

In the commentary on this plate, there will be found one of the clearest descriptions of the mode of introducing the catheter, that we ever seen. Plates 65 and 66 illustrate the surgical dissection of the popliteal space and the posterior crural region. Plates 67 and 68, the surgical dissection of the anterior crural region, the ankles, and the foot. In bringing to a close our notices of the various parts of Mr. Maclise's work, we desire to express our conviction of its excellence, as regards both plates and commentary. That it is without faults, we do not pretend to say; but they are so few in comparison with its merits, that they can be readily forgiven. To the publishers also, our acknowledgments are justly due, for the liberal expenditure they have made upon it, as well as for the exceedingly low rate at which it is offered. With all these good qualities, we are confident it will find a place in every surgeon's library.

The Physicians' Visiting List, Diary, and Book of Engagements for 1852.

Messrs. Lindsay & Blakiston have just published a most convenient little book with the above title, containing blanks for twenty-five daily visits, memoranda, &c., for the use of physicians. With it in his pocket, the practitioner has a list of his engagements, and his day book, and diary. We commend it to the profession from practical experience, as the most complete thing of the kind we have ever seen.

A system of Operative Surgery, based upon the Practice of Surgeons in the United States, and comprising a Bibliographical Index and Historical Record of many of their operations during a period of two hundred years. By HENRY H. SMITH, M. D., Surgeon to the St. Joseph's Hospital, &c. &c. *Illustrated by numerous Steel Plates.* Philadelphia: Lippincott Grambo & Co., 1851.

We have merely had time to glance over this recent publication, the mechanical execution of which reflects great credit upon all connected with it. The illustrations are on steel, and beautifully colored. Of the text, we have not as yet had time to judge. In our next number we purpose to lay before our readers a critical digest of its contents.

Elements of Physiology, including Physiological Anatomy. By WM. B. CARPENTER, M. D., F. R. S., F. G. S., &c., &c. *Second American, from a new and revised London Edition. With one hundred and ninety Illustrations.* Philadelphia: Blanchard & Lea, 1851.

The Elements of Physiology of Dr. Carpenter is one of a series of manuals, published in England, and intended for the use of students more especially. Although it embraces, in a great degree, the scope of the other treatises by the same author, it cannot be regarded as a mere abridgment of them, being, so far as it goes, complete in itself. The present edition has been greatly improved, much of it having been re-written, particularly the chapters on the vital force, and those on generation, and the nervous system. Several new cuts are found in it, and the student will find it in every particular fully brought up to the existing state of the science. We commend it to him as one of the best elementary treatises on the subject.

THE MEDICAL EXAMINER.

PHILADELPHIA, NOVEMBER, 1851.

EXPLANATION.

In the editorial comments which appeared in the September number of this Journal, in reference to the recent personal controversy between Drs. Robertson of South Carolina, and Ramsay of Georgia, we expressed the opinion "that there were grounds for attributing the attack upon our correspondent to personal pique, growing out of a family feud." This opinion was derived from statements made to us in letters received from Dr. Ramsay. Since the appearance of our remarks, Dr. Robertson has addressed us a communication in which he repels the "imputation" alluded to. We feel it our duty to record this denial, though our convictions remain unchanged as to the original character of the difficulty in question.

NEW YORK MEDICAL TIMES.

Under the above title, the first number of a new Monthly Journal of Medicine was issued in New York, on the first of October last. J. G. ADAMS, M. D., is the Editor and Proprietor; and he announces that, in conducting it "while assistance from all quarters will be thankfully received, he designs to render it eminently a New York Journal, a reflection of what, in medical matters, New York does and thinks; a record of the proceedings of her Societies and Academy, of the cases of interest occurring in her Hospitals and Infirmaries."

The number before us is principally made up of valuable original matter, from Drs. Watson, Swett, Cocke, and other gentlemen connected with the New York Hospitals, and abundantly fulfils the editor's programme. He has our cordial wishes for the success of the '*Times*,' which certainly promises to be a most creditable addition to the periodical medical literature of the country.

MEDICAL DEPARTMENT U. S. ARMY.

A board for the examination of Assistant Surgeons for promotion, and of candidates for admission, will meet in New York on the 15th instant.

The board will consist of Surgeon T. G. Mower, president; Surgeons Cuyler, Stirecke, and assistant Surgeon Simpson, members. They will remain in session for two or three weeks.

MEDICAL SCHOOLS OF PHILADELPHIA.

The classes assembled at the various schools bid fair to equal, if not exceed, those of the last session, notwithstanding the many circumstances calculated to operate against them, in the shape of "hard times," short crops, &c.

OBITUARY.

DIED, in Carroll County, Miss., on the 18th of June last, Dr. J. H. FITTS, aged twenty-five.

This is the second death we have had to record within the last few months from among our private pupils. Dr. Fitts, during a residence of eighteen months in this city, had gained many warm friends by his uniformly correct and manly deportment. He graduated with distinction at Jefferson Medical College, and received the certificate of merit from the Philadelphia Association for Medical Instruction. We desire to record his estimable qualities, because the example of those who die young is often lost to those who would most profit by it.

LONDON MEDICAL EXAMINER.

We gratefully acknowledge the receipt of this excellent Journal, a notice of which had accidentally been omitted from our notices to Correspondents. It is among our most valued exchanges.

MEDICAL NEWS.

THE TENNESSEE HOSPITAL FOR THE INSANE, situated about six miles from Nashville, is nearly completed. It is, we learn from the Nashville Journal of Medicine and Surgery, of the castellated style of architecture, 325 feet in length from east to west, and in breadth across the centre, 98 feet. It is said to be very beautifully situated, with two hundred and fifty-five acres of ground and farm land attached to it. Dr. JOHN S. YOUNG is the Superintendent.

Drs. J. C. WARREN, of Boston, and MÜTTER, of Philadelphia, who have been absent during the summer months in Europe, have returned to the United States.

Dr. J. V. C. SMITH, the Editor of the Boston Medical and Surgical Journal, has, we are glad to see, returned from abroad, and resumed his editorial duties. Dr. Smith's interesting correspondence with the 'Journal,' during his tour, was frequently noticed and quoted in the European medical journals.

PROFESSOR A. H. BUCHANAN, of the University of Nashville, returned from a European tour, in October last. Several pleasant and interesting letters were communicated by him, during his absence, to the Nashville Journal of Medicine and Surgery.

SOUTH CAROLINA AND DR. CLARK. COMPLIMENTARY TO THE PROFESSION.—To prove that medical men do not always go unrewarded by those to whom important services may have been rendered, we give the following instance as an exception. The State of South Carolina has recently presented to her distinguished son, Dr. C. J. Clark, a gold medal, weighing two and a half oz., upon one side of which is a representation of the landing of Vera Cruz; and on the other, the South Carolina "Coat of Arms." This honor has been conferred in consideration of the valuable services rendered by Dr. Clark to her brave sons who fought and many of whom fell, upon the bloody plains of Mexico, in maintaining the honor of the State and in defending our common country. South Carolina knows how to encourage talent, and to reward true merit —and in this she has given us many noble examples worthy of her distinguished name.

We hope Dr. Clark will not feel envious when he hears in what manner we were rewarded for three months' services on the Rio Bravo, Mexico. Ours came from head-quarters—Washington city. In turning over to the Quarter-Master at this place the medicine and hospital stores in our charge, one or two silver-washed catheters were missing; these were promptly reported to head-quarters, and in due time a bill of $40 was returned to us, claiming indemnity for that which was loaned and used up in the service of the country.

From that day to this our thirst for military glory has been on the wane, and we wish henceforward to be regarded as an uncompromising advocate for the "Peace Congress."—*New Orleans Med. and Surg. Journal.*

DR. BENNETT DOWLER.—Dr. Dowler, of New Orleans, author of numerous scientific papers containing original and ingenious experimental observations on various physiological subjects, has been appointed to

the Chair of Physiology and Pathological Anatomy, in the Memphis (Tenn.) Medical College. This institution has lately been reorganized, and a lecture-session is announced for the coming winter.

DEATH OF SYLVESTER GRAHAM.—Most of our readers in this part of the country are familiar with the name of this individual, who some years since made himself notorious in urging upon the community the system of light and exclusively vegetable diet to which his name was given. He died lately at Northampton, in Massachusetts, at the age of about 50. The Gazette, of that place, states that his health had been gradually failing for the last year, and he had suffered much from rheumatism in his hands and feet. "Post-mortem examination disclosed no disease in the system, which, in the opinion of the medical examiners, was sufficient to produce his death; and the immediate cause of his decease is thought to be the use, contrary to the advice of his physician and friends, in the extreme exhaustion of the system, of Congress water and a tepid bath."

PROSECUTION FOR MAL-PRACTICE.—A case has recently been tried in the Court of Common Pleas, in the city of Lowell, of a character similar to those mischievous prosecutions that for some years past have alarmed medical gentlemen, in various parts of the country, to such a degree that many have about concluded to let all surgical patients go unassisted in their afflictions. If by any combination of unforeseen constitutional or other circumstances, a fractured bone or a punctured wound is not immediately cured, the surgeon is at once driven to the wall by a prosecution for mal-practice, the object and aim of the prosecutors being to make to themselves mammon out of the spoils, even if they rob the practitioner of his honest earnings and ruin his reputation. It seems that, in the case alluded to, a woman cut her right thumb while paring apples. In consequence of the condition of the wound, which pained her, Dr. J. T. G. Leach, of that city, was called in for advice. From a careful analysis of the testimony in regard to the treatment, his course appears to have been perfectly judicious, and this was the opinion of very eminent medical gentlemen who were called before the court. Notwithstanding the weight of evidence would seem to have been strong enough to have sustained Dr. Leach, to our surprise, at least, the jury could not agree. The more we have reflected upon the testimony, the more we are astonished at the result. Of what value is evidence in courts of law, if it is to have no weight? Dr. Charles A. Savory, Dr. D. Mo.se,

Dr. Thurston, Dr. J. C. Dalton, Dr. Green, Dr. Parkman, and Dr. Balch, if we understand them, sustained Dr. Leech triumphantly.

At the Missionary Hospital, in China, in which Dr. Peter Parker, the American Surgeon, has distinguished himself by the performance of some of the boldest operations in surgery, before the people became enlightened and comprehended the value of his services he refused to operate till a bond had been executed, in which applicants agreed not to claim damages of him, should he be unsuccessful. It would perhaps be the course of prudence for surgeons among us to keep blank bonds on hand, to be filled up before commencing treatment, if the public continue to ask for their best endeavors and then prosecute them for damages should the result be unsuccessful.—*Boston Med. and Surg. Journal.*

Obituary.—Dr. Wheaton, of Providence, R. I., died lately in that city, at the patriarchal age of 90 years. "He was distinguished during his long life, for the virtues of a Christian, the acquirements of a gentleman, and the acquisitions of a scholar."

Dr. Reyer, chief physician to the Royal Hospital at Vienna, lately committed suicide by the use of chloroform.

Dr. Henry K. Burroughs died at Savannah, on the 13th of October. He had been Mayor of the city, and was highly esteemed.

Dr. Alpheus F. Stone, of Greenfield, Massachusetts, President of the Franklin County Medical Society, of that State, died on the 5th of September last, in the 74th year of his age. Dr. Stone had been in extensive practice for fifty years, and was greatly esteemed in his native State.

Dr. Oken.—We have just received intelligence of the death of the famous naturalist, Dr. Lorenzo Oken, whose theory of the Cranial Homologies effected a revolution in philosophical anatomy, and led the way to the admirable researches of our own Owen. The name of Oken is, in this country, most commonly associated with his "Physico-philosophy," a translation of which work, by Mr. Tulk, was published by the Ray Society. It abounds in admirable generalization, unfortunately immersed in much that is false and fantastic, and clothed in the cloudiest phraseology of German transcendental metaphysics. Oken's researches and speculations (for he was as practical as he was dreamy) extended over all departments of natural history. Of the value he set upon facts, and the industry with which he collected them, a lasting monument exists in the volumes of the "Isis," a vast library of

abstracts of the science of his time, founded and conducted by him as a periodical. Few men have had greater influence on European science than Oken. Until forced to quit Germany on account of his political opinions, he held a Professorship at Jena. Latterly, he was Professor of Natural History at the University of Zurich, in which city he died a few days since, at the advanced age of seventy-three years.—*Literary Gazette.*

THE LATE DR. KIDD.—By the death of Dr. Kidd, formerly professor of Chemistry, and since 1822 Regius Professor of Medicine, the University of Oxford has just lost one of the most active of its men of science, who belonged, by their chief works and labors, to a former generation. Dr. Kidd did good service in his time, as his publications testify, in various departments of mineralogical, chemical, and geological research, and about ten years ago, his last appearance, we believe, as an author, he put forth some observations on medical reform. Dr. Kidd was one of the eminent men selected under the Earl of Bridgewater's will to write one of the well known "Bridgewater Treatises," and we believe it has gone through more editions than any work of the series. The subject was, "On the Adaptation of External Nature to the Physical Condition of Man." Together with the Regius Professorship of Medicine, to which the mastership of Ewelme Hospital, in the county of Oxford, is attached, Dr. Kidd held the office of librarian to the Radcliffe Library.

DEATH OF DR. BAUDELOCQUE.—This distinguished physician has lately sunk under a chronic malady, aged 55. He is well known to English readers as a writer on obstetrical subjects, and on scrofula. He was physician to the Hospital for sick children, and had one of the largest midwifery practices in Paris.

COFFINISM.—Under the name of Coffinism, Thompsonism appears to be making some head-way in Great Britain. We find the following allusions to our old acquaintance, under its new name, in the *London Pharmaceutical Journal*, for September:

"Coffinism is another variety of quackery, addressed to a different class of persons, from homœopathy. There is no disguise or mummery in this system. It is an open and impudent repudiation of medical science, physiology, and anatomy. The entire code of practice is comprised in Dr. Coffin's book; the practitioners are shoe-makers, chandlers, mechanics, &c. The remedies are medicinal plants, some of which are powerful poisons. They are not administered in infinitesimal doses, but by

the tea-spoonful or pennyworth; and for the protection of the practitioners when inquests occur, it has been found expedient to establish a 'Defence Fund," to which all subscribe, and in the benefit of which each person participates when in trouble. During the past month a "Medico-botanic Demonstration" was made, occupying four days, during which time the votaries visited Dr. Coffin's Museum, Catlin's Museum, and Kew Gardens; they drank tea at Tabernacle Row, Finsbury; they assembled in Trafalgar Square, and proceeded "in procession through Pall Mall to the Crystal Palace, with appropriate banners, and headed by Drs. Coffin and Harle." The profits of the entertainment go to the "Defence Fund." This description of quackery is quite as formidable as the "Do-nothing" system. It is practiced among a class of persons who are less able to take care of themselves than the wealthy dabblers in globules, and it is gaining ground to an extent which must ultimately effect its own cure.

A mother thinks her child looks dull, she takes him to a Coffinite cobbler, who administers a tea-spoonful of lobelia inflata; the child becomes worse, the dose is repeated. The child dies, an inquest is held. Dr. Coffin comes forward with his "defence fund," the jury are made to believe that the death of the child may be attributed to the treatment of the medical man who was called in at the last extremity. The cobbler is acquitted, and returns to his practice, impressed with the conviction that if the child had taken another dose of his medicine the catastrophe would not have occurred."

Munificent Legacy.—Dr. Jecker, who has left various useful works on physiology and microscopal anatomy, has just died, and, by his will, gives the Academy of Sciences at Paris the sum of £8000, to found an annual premium, to be awarded to the author of the most useful work on organic chemistry.

Medical Periodicals in Egypt.—We have received the numbers for June and July of a very interesting monthly periodical, published at Alexandria, whose title is *Giornale Optamologico Egiziano.* This paper is written in Italian, and edited by Dr. Abbate; the size is but half a sheet, but the articles, both original and copied, are well selected, and there is no doubt but this journal might be made very useful, emanating, as it does, from a country where ophthalmic affections are unfortunately so frequent. In the June number there are some good remarks on staphyloma, myopia, and presbyopia, &c.; the former are continued in the number for July, with interesting articles on the good effects of valerianate of zinc and hyoscyamus in rheumatic ophthalmia, on the hygienic means to be used in Egypt to avoid affections of the eye, &c., &c.—*London Lancet.*

WAS THE ROMAN ARMY PROVIDED WITH ANY MEDICAL OFFICERS.—In a late pamphlet under this title Dr. Simpson describes a tablet discovered at Housesteads, in Northumberland (the ancient Borcovicus) one of the principal stations on the great defensive wall, reared in the second century by the Emperor Hadrian. From this monument, which was raised by his companions "to Anicius Ingenuus, Physician in Ordinary of Cohort the first of the Tungrians," we learn that more than one medical officer was attached to each cohort. Further evidence is also adduced by Dr. Simpson, rendering it probable that there were superior medical officers placed over the staff of the legions.

STUDY OF ANATOMY IN EGYPT.—At the time when Mahomet Ali was persuaded by Clot Bey to organize a school of medicine in Cairo, the old man consulted the council of the Ulama, or learned men of the orthodox sects, in regard to the legality of dissecting human bodies, for the purpose of anatomical knowledge. They decided that it would be repugnant to religion. However, he said nothing, and gave directions to his surgeon to proceed. He had the united force of Musselman prejudices and Moslem bigotry marshalled against him; but he was the pillar that sustained the entire fabric of Egyptian government, against whose orders no one dared raise the voice of remonstrance, however much they might growl over an infraction of the Koran. He lived long enough to have his bigoted subjects become familiar with dissections, and till the four orthodox sects of the Hanafees, Shafees, Màlikees and Hambelees, had lost their influence over the ignorant rabble of the metropolis. Anatomical pursuits are now conducted there on a proper scale, and under fewer restrictions than in several of these United States, where a physician and surgeon are required to understand anatomy in order to practice, and yet they are liable to prosecution, to fine and imprisonment, for doing precisely what they are required to do. Mahomet Ali was in advance of the age in his own dominions, and far wiser and more liberal than some of the enlightened christian legislators of these United States.—*Boston Med. and Surg. Journal.*

RECORD OF MEDICAL SCIENCE.

SURGERY.

Hydrastis Canadensis in Gonorrhœa. By Dr. D. M. McCann, M.D., Martinsburgh, Ohio.—As your excellent Medical Journal has for its object the diffusion of knowledge advantageous to the Medical profession, permit me to call the attention of the profession through its columns to the use of Hydrastis canadensis, (yellow root, orange root,) in gonorrhœa.

I am not aware that any of my brethren have ever used it in this affection, before myself. My experience, however, in the use of it, though not extensive, is yet sufficient to warrant me in soliciting a trial of it by those having more opportunity of testing its curative power than I have. I have used it in several cases in various stages of the disorder, and in *every case* with the most satisfactory results; more especially with males than females.

I was led to its use by noticing its well known sanative properties over inflammations of mucus and epithelial structures, such as aphthæ of the the mouth, &c. The ardor urinæ, and discharge of mucus, had been entirely suspended in every case in from twenty-four to seventy-two hours. In some cases, I used the balsam copaibæ, in others, injections of infusion of the hydrastis alone, but with about the same results, a perfect and *permanent* eradication of the disorder.

I have varied the strength to suit the case in its different stages, but as a general rule I have used about one drachm of the dried root to the pint of infusion—injecting a syringe full three or four times a day.

I hope that some of the profession will give this article a fair trial.—*Ohio Med. and Sur. Journal.*

About the time of our commencing the practice of medicine, ten years ago, our attention was called to the use of the infusion of yellow root as an injection in gonorrhœa, by a skilful and experienced physician of this city, Dr. U. E. Ewing. At his suggestion we employed it ourself, and with such good results, that we have continued, to the present time, to use it in cases in which astringent injections were indicated. A strong infusion of this root containing a small proportion of sulphate of copper in solution, forms one of the best injections for gonorrhœa we have ever used; and for some years after we had our attention called to it by Dr. E. we used it almost exclusively, preferring it to any injection that we had employed. Of late years, however, we have used the solution of chloride of zinc, not because of its superior efficacy, but simply because it is more readily and conveniently prepared. We have tried nearly, if not quite all, the injections we have seen recommended for gonorrhœa, and we have no hesitation in giving the two already mentioned the pre-

ference. With the infusion of yellow root alone, or containing sulphate of copper in solution, and the solution of chloride of zinc, we think all the good may be accomplished in the treatment gonorrhœa which can be gained by injections.

The formula of the infusion of yellow root, as directed by Dr. Ewing, which he has employed upwards of twenty years, is as follows:

Pulv. Hydrastis Canadensis,	i.
Aquæ Puræ,	f℥viij.
	M.

Digest for several hours and strain.

To this Dr. E. is in the habit of adding sulph. cupri ℈i. We have directed this injection repeatedly in confirmed cases of gonorrhœa and gleet, and our experience confirms the favorable report of its value, which we received from Dr. Ewing ten years ago.—*Transylvania Med. Jour.*

On the Pathology and Treatment of Varicocele.—In a thesis with this title, M. Prunaire (*Gazette Medical de Strasbourg,*) speaks of a new mode of treating varicocele by caustic. He also enters minutely into certain anatomical considerations calculated to throw light on the pathology of the disease. In the first place, he has taken the measurements of the right and left spermatic veins in fourteen cases, together with the comparative weight of the testicles on either side. In classing the subjects according to their ages, he finds that between the ages of 3 months and 2 years, there was a difference of from one to two centimetres in favor of the left spermatic vein; between the ages of 30 and 35 years the difference was from two to three centimetres. As regards the size of the testicles, the author has constantly found the left larger and heavier than the right.

A recent writer has given the absence of valves in spermatic veins as the cause of varicocele, but this the author refuses to admit, as he concludes from the observations of St. Hilaire, as well as from his own researches, that valves are present in these veins in the majority of instances; this, of course, suffices to vitiate the theory arising out of their presumed absence.

The treatment adopted by M. Prunaire is thus described:—The pubes being denuded of hair, the patient is requested to walk for an hour or two; he is then chloroformed. An incision is next made over the cord, the sheath is opened with the utmost caution, and the veins scrupulously isolated from the other structures; this being done, some lint is passed underneath them to prevent the contact of the caustic with the subsequent tissues, and the veins are daubed with Vienna paste. After a few minutes the caustic is sedulously removed by washing the part in a dilute acid solution, and the wound is dressed. The veins which have been touched shrivel up, and when the eschar falls, are found to be completely obstructed.—*Prov. Med. and Sur. Journ.*

New mode of treating Epiphora. By Mr. BOWMAN.—This plan consists in slitting up the canal from the punctum on the conjunctival aspect, so as to carry backwards the orifice at which the tears are received on to the mucous membrane near the caruncle; and Mr. Bowman finds that the tears are in fact taken up by the remaining portion of the canal, while the end towards the punctum is converted into a groove. For the cases of obstruction from injury or other cause he suggests a modification of this operation, by which the canal between the obstruction and the sac may be slit up for some way, so as to receive the tears at a new opening. The cases to which these new operations are applicable have been for the most part abandoned by surgeons as incurable.—*Medical Times.*

Unconsolidated Fracture of the Thigh successfully treated by Acupuncture. By M. LENOIR.—The rationale of the various plans of treatment which have been adopted, in order to prevent the formation of false joints, consists in the establishment of an inflammatory action in the fibrous tissue, situated between the bony fragments, and the consequent secretion of a secondary callus. One of the methods proposed has, in the hands of its inventor, M. Malgaigne, been unattended with success: we mean acupuncture. But the following case, communicated to the Societié de Chirurgie, by M. Lenoir, proves that this mode of treatment deserves some notice, even although it has not afforded similar results to M. Maisonneuvre. Much of the success obtained by M. Lenoir must, doubtless, be attributed to the many precautions observed by him.

Dupèchè, a carpenter by trade, aged thirty-three years, in falling from a height of fifty-two feet, fractured his right thigh. He was immediately conveyed to La Pitié, and placed under the care of M. A. Bérard. After fifty-four days of treatment, the patient began to walk with the assistance of crutches, when M. A. Bérard, in order to remove the stiffness which existed in the knee-joint, endeavored by force to extend the motions of this articulation; in one of these manœuvres the neck of the femur gave way, and the signs of the fracture re-appeared. The broken bone was again reduced, and an immovable apparatus applied to keep the fractured ends *in situ*; at the termination of a month the apparatus was removed, but the fracture had not consolidated, and the patient had himself conveyed home.

Six months afterwards, M. Lenoir took him into the hospital for the purpose of employing the treatment by acupuncture; but before trying this plan, he used all the means likely to insure success, and, amongst others, he had him placed on a mechanical bed, so as to maintain complete freedom from motion, even in attending to the calls of nature. As the fracture was oblique, and the upper fragment very sharply bevelled, and the fragments, by overlapping, occasioned a shortening of about two and a half inches, M. Lenoir had an apparatus, for maintaining extension, constructed by a carpenter, a friend of the patient. This apparatus consisted of a long box, nearly in the shape of the limb, and consequent-

ly wider above than below, but longer than it; it was about three inches deep, and was composed of three pieces of light wood closely united to one another; of these three splints, the external was eight inches longer than the others, which terminated at the junction of the thigh with the trunk; this longer portion had at its upper end a mortise intended to facilitate the employment of counter extension; to the lower end of this groove a kind of toothed wheel and axel was adapted, to which was applied a catch for the purpose of fixing it. This apparatus, lined with carded cotton, received the limb, the foot being covered with a gaiter of ticken furnished with a foot-strap; by means of this strap rolled round the wheel, extension was maintained by another strap well padded, passing along the fold of the groin, having the ischium as its *point d' appui*, and its ends fixed in the mortise in the outer splint of wood.

For several days nothing was done except to tighten the straps according as they became relaxed. At last, on the 12th of August, seven months and some days after the accident, M. Lenoir proceeded to insert the needles. At first he introduced four, each being four inches long, and furnished with a head. Their points were directed along the inner surface of the upper fragment, from below upwards; an interval of but half an inch being left between each needle. Contrary to his expectation, and although he passed them in as far as the heads, he met no obstacle to their introduction. This, doubtless, depended on the existence of an interval between the two fragments, the extension effected by the apparatus having reduced the fracture only in the direction of the length of the limb, and not transversely. The four needles remained *in situ* for six days; at first they excited redness of the skin, then a little pus appeared about them and rendered them moveable, and finally, a slight swelling occurred. These symptoms indicating that inflammation had developed itself, M. Lenoir withdrew the four needles; and, after having cleaned them, he re-introduced them higher up, following carefully the direction of the upper fragment, and leaving between them the same intervals as before. The same symptoms followed this second operation; at the end of five days the needles had become moveable, and were taken away; and the inflammatory action now appearing to be sufficient to produce union, the introduction of the needles was not repeated. The inflammatory swelling of the limb was treated by poultices, antiphlogistic diet, and cooling drinks; and when it was subdued, the two surfaces of the fragments were brought into closer proximity by means of small splints placed around the thigh, and tightened by two straps of leather, a practice previously employed by Amesbury. The apparatus was inspected daily, and tightened when necessary. At the end of twenty-three days, in order to ascertain how far consolidation had advanced, the limb was completely uncovered; it was found to have neither got out of shape nor undergone retraction; but when the hand was passed over the seat of the fracture, it still yielded; splints were immediately re-applied, the limb was replaced in its groove, and extension continued. No fresh examination was made until the expiration of thirty-five days from this

time, and then the callus was found to be sufficiently solid to justify the removal of the entire apparatus. Carefully measured, the limb was found to be rather less than eight-tenths of an inch shorter than that of the opposite side; the knee-joint was stiff, but the patella was still capable of transverse motion; the thigh and upper part of the leg were œdematous, but otherwise there was no apparent deformity at the seat of the fracture, and the callus was not very bulky. Lastly, the coxo-femoral articulation was capable of motion, and the patient was able to raise the limb by the unaided action of the muscles. As an additional security, he was advised to keep his bed, and, during a fortnight that he was confined to it, the œdematous swelling of the limb was treated by fomentations of aromatic wine, and by bandaging. At the end of that time he got up and walked, at first with the aid of crutches, and afterwards of a single stick; finally, he left the hospital cured, and M. Lenoir subsequently ascertained that on his return to his native district (Auvergne,) he had, during the entire following autumn, driven a plough, and that he now experiences no difficulty in the pursuit of field labor.—*Dublin Quar. Journal, from Bulletin Général de Thérapeutique*, Dec. 15, 1850.

Prophylaxis of Syphilis.—Dr. Langlebert announced to the Academy that he had discovered a substance capable of destroying the effects of the syphilitic virus. This preservative consists of a strong alcoholic solution of soap, having an excess of alkali. Dr. Langlebert had performed several experiments by inoculating with the poison of chancres, and then applying his antidote within about five minutes afterwards. The effects of the virus had in every case disappeared.—*Lon. Med. Gaz.*

Traumatic Tetanus successfully treated by Friction with Chloroform. By Dr. MORISSEAU, Physician to the District Hospital at La Fleche (Barthe.)—The patient was about forty years old, a man of good constitution. Eight days before admission, he had slightly wounded himself on the front of his leg, while at work with his pick-axe. The trifling wound had healed by the fifth day. On the sixth day tetanic symptoms manifested themselves.

The patient was at first treated at home, but the disease advancing, he was removed to the hospital. When first seen by Dr. Morisseau, the tetanus was fully developed; there was persistent contraction of the muscles of the jaw, the chest, abdomen, and back; the body was bent double every hour; deglutition impossible. The pulse small and slow; nothing particular was observable of other functions.

Friction was performed with four grammes (one drachm) of chloroform. This quantity was repeated three times during the day. The patient was placed in an acidulated vapor bath.

On the following day a considerable improvement had taken place. The patient had perspired freely; he had slept well which he had not done before, since the commencement of the attack. He had swallowed

a few spoonsful of liquid; the muscles were less rigid; convulsions shorter and less frequent.

The dose of chloroform was increased to twenty grammes, three times a day. This treatment was continued for five days with the best results; all the symptoms had disappeared on the sixth day. A sense of lassitude and debility alone remained, and these soon disappeared under suitable diet.

The editor of the *L'Union Médicale* adds to the above the following taken from the *Gazetta Medica Lombarda*: A laborer, twenty-eight years of age, was seized with tetanus two days after having lain on damp ground whilst he was in a perspiration. The patient was immediately subjected to the treatment usually adopted there, and which consists in frequent venesection. He was bled eight times in four days, once to the amount of twenty ounces; about a hundred leeches were applied to the parts that were painful, and other ordinary means were adopted. On the sixth day the patient was in a very serious state, when M. Tibaldi had recourse to frictions with ether in order to calm the muscular contractions. Two frictions were practised on the loins; venesection and half a grain of acetate of morphia was given. Whenever friction was applied, the action of the muscles was moderated. On the following day another bleeding to ten ounces, and frictions with ether on the neck and back. On the third day of this treatment the patient could sit upright. In two or three days more the patient was convalescent.—*Lon. Med. Gaz.*

New Method of Applying Collodion for producing Occlusion of the Eyelids.—The process of occlusion of the eyelids, by bringing them together and applying collodion over them, presents two inconveniences. If a drop of the collodion reaches the conjunctiva, it produces irritation always very painful, and especially troublesome if, as is generally the case, the membrane is already inflamed. In the second place, if it be desired to examine the eye before the collodion has spontaneously detached itself, it becomes necessary to remove it with ether or scissors—both delicate and irritating processes, often causing pain and apprehension to the patients.

M. Barrier, of Lyons, employs a process which avoids these difficulties. A thread is placed vertically on the upper eyelid; a small piece of fine linen is then dipped in collodion, and placed on the lid, a little above the root of the eyelashes, so as to fasten down the thread. The same thing is done on the lower lid. To keep the lids closed, it is only necessary to tie the threads in a knot or bow; and it is quite easy to open or separate the eyelids.—*Annales d' Oculistiques*, as quoted in *Gazette Médicale*, August 16, 1851.

Extirpation of a Voluminous Bronchocele. By M. Roux.—M. Roux presented, some time ago, a patient of his to the Academy of Medicine, from whom he had successfully removed a large bronchocele. The man's age is about thirty-five, and the tumor, at first very small, had been in-

creasing, during the last fifteen years, to the size of two fists, and lay principally on the left side of the neck. The swelling was somewhat hard, almost immoveable; and seemed firmly attached to the larynx. The patient was extremely anxious for its removal, and M. Roux, after some hesitation, consented to operate. The incision was made in a longitudinal direction, and ran from the os hyoides to the sternum; M. Roux found it easy to enucleate the growth, with the precaution, however, of tying the thyroid arteries and some venous trunks as they came into view. When the tumour was almost completely detached, the pedicle, by which it was still connected with the neck, was tied, and then divided in front of the ligature.

The only phenomenon worthy of attention, which was noticed during the operation, was a fit of dyspnœa, after which the patient experienced an almost complete aphony; this lasted some time after the operation, and even now there is much hoarseness left. M. Roux accounts for this circumstance by attributing it to the division of the anterior laryngeal nerve. The patient was operated on two months ago, and the wound is now perfectly cicatrized. The tumor weighed about nine ounces and a half; it measured nine inches in circumference, and about seven in its transverse diameter. M. Velpeau was afraid that M. Roux's example would be too readily followed by other surgeons under less favorable circumstances, and thought the operation very dangerous. At the meeting of the 24th of September, M. Velpeau himself brought forward another case of extirpation of the bronchocele, which was performed by M. Cabaret, of St. Malo; this was successful, as well as a third undertaken by M. Hutin. Some discussion arose as to the propriety of giving the name of goître to tumors arising *on* the thyroid body, as well as to enlargement of that gland itself. M. Sédillot contended that the appellation ought to be confined to enlargements of the thyroid gland; Messrs. Velpeau and Roux opposed that opinion.—*London Lancet.*

Treatment of Scabies.—M. BAZIN, physician to the Hôpital St. Louis, of Paris, published in July, 1850, several cases of itch cured in a few days by frictions with the sulphur ointment all over the body. The same physician confirms, in *L'Union Medicale* of November 9, 1850, the efficacy of the treatment, by stating,—"The patients who formerly left the hospital after twelve or fifteen days only, and very often came back with a relapse of the disease, are now cured in two or three days." But this is not all, for M. Bazin, finding out that some patients have an insurmountable dislike to sulphur, was induced to try several ointments prepared with essential oils—as those of lavender, thyme, rosemary, and likewise turpentine and mercurial ointment. None of these were effectual. He then had the idea of trying unmedicated axunge of oil, and found it answer remarkably well, six frictions during three days being sufficient.

It will be recollected that Mr. Taylor, surgeon to the Clerkenwell Infirmary, published a book some months since (see THE LANCET, October 12, 1850, p. 418,) wherein he advocates frictions of a like character for

the cure of typhus fever, scarlatina, &c. It would be highly useful if frictions, with simple unctuous substances, were more extensively tried in the diseases spoken of by Mr. Taylor and M. Bazin. The ease with which the remedy is obtained, and the little risk which is incurred by its use, would render it inestimable if found efficacious, especially as regards the treatment of the poor. M. Bazin has likewise tried a chamomile ointment, which cures the itch in three frictions. It is composed as follows: Powder of fresh chamomile, white oil, axunge, of each sixteen ounces. M. Bazin proposes, therefore, in ordinary cases, that the sulphur ointment be used, (sublimated sulphur, very fine powder, of each two drachms; one yolk of egg; olive oil one ounce and two drachms and a half,) in exceptional cases, either three frictions with the chamomile ointment, or six with the simple oil and axunge.—*Ibid.*

Observations on Nitrate of Silver Stains of the Conjunctiva. Case of Absolute Blackness. By JAMES VOSE SOLOMON, M. R. C. S., Surgeon of the Birmingham Eye Infirmary.—The application of a solution of nitrate of silver, if long and injudiciously applied to the conjunctiva of the eye, produces a discoloration which is indelible. The sclerotic conjunctiva becomes of a dusky brown, or of an olive color; the palpebral linings, more particularly of the lower lid, assume a brownish or livid hue, or, as will be presently shown, become black; the sulcus between the inferior lid and globe is more deeply dyed than the other parts. In the majority of cases the conjunctiva of the superior lid retains its natural color. In a few rare instances the salt becomes incorporated with ulcers of the cornea, forms a subchloride of silver, and perpetuates one or more black lines in their cicatrices.

A still more uncommon, and I believe hitherto unrecorded change of color, consists in absolute blackness of the conjunctiva, an instance of which, the only one that has ever come under my notice, is probably of sufficient interest for publication in your journal.

Case.—A young woman, aged 29, came from a small town in Radnorshire to consult me for a dimness of vision.

Both corneæ were extensively covered by opacities, which were irregularly streaked with black lines. The caruncula lachrymalis and tarsal borders were of a jet-black color, giving the appearance, at a cursory glance, of soot or dirt settled on those parts. The palpebral conjunctivæ were smooth, and in color not quite so black as their margins. The sclerotic conjunctiva presented a deep olive color. I found on inquiry, that she had, at one time, suffered from strumous ophthalmia, for the cure of which a strong ointment and some drops had been prescribed and freely used. These applications had been continued for three or four months.

The black streaks which traversed the corneal opacities, and the olived sclerotic conjunctiva, decisively indicated the nature of the other discolorations.

There is a much greater susceptibility to these stains in some individuals than in others. They are more common to adults than children; possibly because ophthalmic disease among the latter is for the most

part either of the strumous or purulent kind, in both of which the surface of the eye and its appendages are continually bathed in secretion.

If we excise a portion of discolored sclerotic conjunctiva, a white cicatrix is formed, indicating that the sclerotic maintains its natural color.

At present we are unacquainted with any means for removing the stains under consideration. Our obvious duty is to prevent their occurrence by vigilant attention and care. This may be accomplished by prescribing the preparations of nitrate of silver in short and intermitting courses, and by frequently noting the condition of the lining membrane of the inferior palpebra. In public ophthalmic practice, it would be well if the solution were not dispensed in larger quantities than two drachms at one time.

Since writing the above, a man 60 years of age, who has been all his life a martyr to rheumatism, has become my patient at the Eye Infirmary. The right globe is collapsed; the left eye retains some vision; it has been repeatedly inflamed; the iris is of a dull leaden color, and convex towards the cornea; the pupil is puckered, adherent to the lens, and filled within a third of its area by opaque lymph (artesia irridis imperfecta.) Near the centre of the cornea is a leucoma.

Fifteen or eighteen months ago, he for the first time consulted a surgeon, who prescribed caustic drops, which he has ever since applied. The conjunctiva of the inferior palpebral sinus is of a greenish black color. The inner surface of the superior lid has lost somewhat of its natural polish; a few black drops assume an arborescent shape near the superior punctum; a light brown and well-defined narrow stripe extends along the concave aspect of its tarsal cartilage.

I have cited this case to show the impropriety of allowing patients to use the preparations of lunar caustic *ad libitum;* and as an interesting example of how well the superior lid escapes serious change of color, even in the worst and most neglected cases. It also illustrates the destructive character of uncontrolled rheumatic ophthalmia.—*London Medical Times.*

MATERIA MEDICA AND THERAPEUTICS.

Medical Properties of the Scullcap, (*Scutellaria laterifolia.*)—Dr. Hunton, of Hyde Park, Vt., speaks very highly of this indigenous plant, as a remedy in hysteria, chorea, and other nervous diseases. The S. *galericulata,* or *European scullcap,* which also grows wild in this country, possesses, he says, similar medicinal properties and is less disagreeable to the taste. He also considers the Scutellariæ to be among our most valuable vegetable tonics.—*Abridged from N. J. Medical Reporter, Oct.* 1851.

Maguey, or Agave Americana, as a Remedy for Scorbutus.—The expressed juice of the Agave Americana, the American Aloe or Maguey,

as it is termed in Mexico, has lately been used with the greatest success among the troops at Fort McIntosh, in Texas, as a remedy for Scorbutus. Dr. G. Perin, Assistant Surgeon U. S. A., reports several cases treated with the Maguey, which go to show it to be greatly superior to other remedies in the disease in question. A notice of the Maguey is to be found among the unofficinal articles in the U. S. Dispensatory. It is indigenous in Texas, and, Dr. Perin thinks, also in New Mexico and California. In Mexico, it grows in great abundance, and is the plant from which the favorite drink, "pulque," is made.

"The manner in which it is used is as follows, viz.:—The leaves are cut off close to the root, they are placed in hot ashes until thoroughly cooked, when they are removed, and the juice expressed from them. The expressed juice is then strained, and may be used thus, or may be sweetened. It may be given in doses of f.ʒij. to f.ʒiij. three times daily.

It is not disagreeable to take, and in every instance it has proved to agree well with the stomach and bowels.

After the leaves have been cooked, the cortical portion near the root may be removed, and the white internal portion may be eaten; it appears to be a wholesome and nutritious food. Dr. P. has seen muleteers use it in this way, and they seem to be very fond of it. He has been informed, upon good authority, that several tribes of Indians in New Mexico make use of it in the same manner. The use of the leaf in this way, he believes, will ward off most effectually incipient scorbutus." —*Abridged from N. Y. Journal of Medicine*, September 1851.

Digitaline.—Some highly interesting researches on *digitaline*, the active principle of digitalis, have been recently made in France, by MM. Quevenne and Homolle. The following are the chief points of interest which they present:—

"Digitaline is soluble in small quantity in the serum of the blood, without producing in it any apparent change. The proportion dissolved appears to be the same as in water. It is dissolved also in filtered gastric juice. Digitaline exerts no action upon litmus. It is dissolved also in small quantity in water; and in all proportions in weak or concentrated alcohol. *The characteristic and distinctive property of digitaline is, to be colored of an emerald green by concentrated hydrochloric acid, forming a turbid solution.* Digitaline belongs to the class of immediate neutral principles; it combines neither with acids (the tannic excepted) nor with alkalis.

"To be assured of the *identity* or of the *quality* of digitaline, an important and capital point in a therapeutical view, MM. Homolle and Quevenne have paid attention to the different degrees of bitterness of this substance; for they state that its degree of bitterness is incontestably a measure of its degree of energy. To succeed in this test, the following plan is to be adopted: 'One centigramme of digitaline is dissolved in two grammes of alcohol, and the mixture is progressively diluted with water, until the complete disappearance of the bitter taste. If the

digitaline is good, this quantity will require the employment of two *litres* of water.' This method of appreciating the intensity of the taste of bodies, employed already by other observers, to judge of the richness of certain medicinal preparations, has been considered by MM. Homolle and Quevenne as proper for enabling them to obtain digitaline always identical with itself. This test is the more indispensable, because, in conforming rigorously to the mode of preparation just described, no one can be certain of having always the same product. Digitaline, except in its action on the animal economy, does not possess, unfortunately, any essential property by which we can positively recognise its purity. It does not crystallise, and does not form any crystallisable combinations; we can therefore never affirm that it has been obtained sufficiently pure, or that it has not been mixed. Let the person who prepares digitaline, therefore, be well acquainted with the fact, that this product does not offer any suitable proofs of its purity, except inasmuch as, subject to the experiment of dilution, it gives the same result as a *type* of acknowledged purity. Let the physician be also warned that digitaline does not constitute a medicine of such a certain identity that he should neglect a great degree of prudence in its use; a prudence which, besides, is demanded by the extreme activity of this new therapeutic agent.

"MM. Homolle and Quevenne having thus succeeded in obtaining digitaline in the state which they call *identical*, it remained for them to determine what was the pharmaceutic form for giving it, under the quadruple relation of *safety*, *convenience*, *good preservation*, and *easy administration*. The solution of this problem was the more important, because the product under consideration possesses a very great degree of activity, so that it ought to be administered only in milligrammes, or, in fact in an *infinitesimal* dose. Among the different pharmaceutical forms considered by MM. Homolle and Quevenne, the pilular form is that to which they have given the preference. 'The variety,' say these authors, 'which appears to us the best, is that of little sugar-plums, in which the active matter is enveloped in a layer of sugar, so that the patient, by reason of their very small size, can swallow them easily, without mastication, and therefore without any other perception than that of the sugar which covers them.' These sugar plums are called granules by the authors, and each contains a milligramme of digitaline; and it appears that this mode of administration preserves the powers of the drug to a period of which MM. Homolle and Quevenne have not ascertained the limit.

"As regards the physiological and therapeutic action of digitaline, one of the authors made a series of experiments on himself, and his exemplary exactness in recording the results is warmly eulogised by the reporters. From the analysis of the first six trials, undertaken in the course of the years 1842, 1843, 1847, 1848, 1850, it results that the *medium* of the diminuition in number of the pulsations of the heart and arteries has been about four pulsations *during*, and four *after*, the administration of the medicine. Experiments made on two dogs proved that, in one, the pulse was lowered from 59 to 51, and that in the other, from 87 to 69, by the administration of minute doses of digitaline. As to the

comparative efficacy of the preparations of digitalis hitherto employed, and of digitaline, MM. Homolle and Quevenne leave this point to be finally determined by clinical experience; but they think that their own observations, and the works published up to the present time, lead to the belief that the question will be resolved in favor of digitaline; and they quote the authority of MM. Hervieux, Strohl, and Sandras, who have all employed the digitaline in their practice with most happy results. M. Hervieux states, that one of the circumstances which plead most in favor of digitaline, is the facility of apportioning the dose; for, while this can be done in the case of the preparations of digitalis only by a very rough approximation, it can be accomplished in the case of digitaline with a mathematical rigor. M. Sandras declares, that he has never met with the inconvenience attributed to digitalis, while he has employed digitaline; the latter has appeared to him to be easy to take, and easy for the patient to bear; its effect has been perfectly fixed and regular, according to the doses in which he prescribed it. Some clinical observations made by MM. Homolle and Quevenne are then related, but we cannot say either that the cases seem to be well chosen, or the results accurately noted; and the indiscriminate manner in which the digitaline was prescribed, is not to be commended. In the first case, for instance, there was a 'puerperal affection,' but we are not told what was its nature; in the second, there was an 'affection of the heart,' and a 'profound disturbance of the circulation;' in the third case, there was hypertrophy of the heart, with 'lesion of the orifices;' in the fourth case, there was 'profound perturbation of the cardiac circulation;' all these terms are far too vague for the present advanced state of science. Again, the digitaline was given in the seventh case for cyanosis, from persistence of the foramen ovale; and in the sixth, it was given in large doses for anasarca with albuminous urine. In our humble opinion, neither of these diseases would justify the use of digitalis in any form.

"The following statement by the authors is of extreme importance, and completely accounts for the frequent uncertainty which attends the employment of digitalis in medical practice. 'We have been able,' say MM. Homolle and Quevenne, 'to ascertain, when we have procured our specimens of digitalis, that, in the quantity which existed in 1847 on the Place de Paris, there was about a fourth part well dried, a fourth of middling quality, and half which was badly dried and manifestly bad. It is evident that this last and considerable fraction was not thrown away; and, as digitalis has only a medical use, we are obliged to admit that it has been consumed by the sick.'"—*London Journ. of Medicine.*

OBSTETRICS.

Hernia of the Ovary mistaken for an Encysted Tumour—Extirpation—Death. By M. EVERSANT.—A girl, eleven years of age, came into the hospital to be under the care of M. Eversant, having a tumor in the left labium. Her parents had observed it when the girl was a year old, but it had never caused any trouble till eighteen months pre-

viously, when it began to be painful, and made the patient walk lame. The tumor was very moveable, more moveable than a cyst. It was easily pushed from the inguinal ring to the lowest part of the labium—like a testicle in the scrotum. It was of the size of a small nut, painful on pressure, and in one point fluctuation could be perceived.

It was diagnosed to be an encysted tumor, and it was resolved to extirpate it. An incision was made in the centre of the labium, and the dissection carefully continued layer by layer. A cord similar to the spermatic cord, and containing part of the fallopian tube, was arrived at and tied. It was then cut across below the ligature, and the ovary removed along with the cord attached.

The girl shortly took peritonitis, and died on the third day after the operation.—*London Monthly Journal from Gazette de Hôpitaux*, 24th May 1851.

Case of Inversion of the Vagina coming on during Labor. By Dr. LAMBERT.—The patient was a laboring woman. During the last six months of her third pregnancy she suffered from prolapsus of the vagina whenever she was working at out-of-door labor. The swelling thus produced attracted her attention, but did not alarm her, as it disappeared when she lay down in bed.

When labor came on, the tumor again appeared between the limbs. The midwife in attendance finding the labor tedious, and ignorant of the nature of the case, recommended the woman to make the most of her pains, and ordered her a vapor bath. The only apparent effect of this advice was the increase of the tumor to double its former size. When Dr. Lambert arrived, he found it projecting from the vulva, of the size of the two fists, of a blueish-red color, round, wrinkled, and of considerable consistence. At its lower extremity was an opening through which the finger could be introduced to the os uteri.

Dr. L. recommended rest in the horizontal posture, with the pelvis a little elevated, cold applications to be made to the tumor, and slight pressure applied to replace it during the intervals between the pains. After considerable delay the tumor was reduced, and the woman delivered with the forceps. She made a good recovery, and the swelling has never returned.—*London Monthly Journal from Revue Med. Chir.*, April 1851.

On Kiestein. By Dr. VEIT.—In consequence of the discrepancy of opinion which prevails among observers as to to the value to be attached to the appearance of the urine termed Kiestein, as diagnostic of pregnancy, Dr. Veit has, during a year and a half, been conducting a series of experiments at the Halle Lying-in-Institution. He has examined for this purpose the urine of 10 men, of 4 non-pregnant females, and of 48 women in various stages of pregnancy. He comes to the same conclusion as Höfle (*Chemie und Mikroskop am Krankenbette*) and, recently, Lehmann, viz., that the so-called pellicle of Kiestien is no peculiar matter at all, and is not of the slightest value as a sign of pregnancy. In urine of both non-pregnant and pregnant women, pellicles are formed,

containing vibrones, and frequently the triple phosphate; the chief difference between the respective urines being, that in that of pregnant women, alkaline, and in that of non-pregnant women, acid, reaction more frequently manifests itself. This may in some measure depend upon the greater concentration of the urine in pregnancy, and the larger proportion of mucus mixed with it, as a consequence of the changes induced in the condition of the mucous membrane of the bladder by the passive hyperæmia of that organ during pregnancy. Persons partaking of a more nitrogenous diet than did the poor pregnant women whose urine was examined, might furnish different results in this respect.—*Brit. and For. Review, Oct.* 1851, *from Zeitsch. für Geburt.*

Compression of the Aorta in Uterine Hæmorrhage. By M. Chailly Honore.—M. Chailly-Honoré considers that this practice is not resorted to so frequently as from its merits it deserves to be; and believes, that had it been employed in one or two cases in which transfusion has been lately performed, it would have rendered that *dernier ressort* unnecessary, or would have enabled it to save life when employed. Rudiger employed compression so long back as 1797; but Ulsamer first advised its being applied through the wall of the abdomen in place of through the uterus. The practitioner, standing at the left side, passes his right hand between the uterus and intestines, seizes the vessel between the index and medius finger, fixing it firmly against the vertebral column, and pressing on his right with his left hand. If in 13 cases in which this practice has been resorted to, half the women died, this arose from its being deferred until they were *in extremis*, and all other means had failed. To these cases M. Chailly opposes 18 others, occurring in his own practice, and among which only one woman died, in whom also the application had been too long delayed. In some of these, compression was maintained for two hours without inconvenience. In the former series of cases the compression was delayed too long, and employed without rule, confidence, or patience. In the latter it was resorted to in time, and methodically continued. Of course the practice is not advocated as curative, but as a means of gaining time in an emergency, wherein time is everything.—*Ibid, from Bull de l' Academie.*

PATHOLOGY AND PRACTICE OF MEDICINE.

On Chronic Vomiting, as symptomatic of Disease of the Kidneys.—Dr. Cathcart Lees, of the Meath Hospital, Dublin, reports in the Dublin Quarterly Journal of Medical Science, for August, 1851, several cases illustrative of the connection between chronic vomiting and disease or irritation of the kidneys. He remarks:—

"Nausea and vomiting are very constant occurrences towards the latter periods of chronic degeneration of the kidneys, but as they are met with in most cases of irritation of the organ, no matter from what

cause, whether it be simple acute nephritis, the mechanical irritation of a calculus, or gradual obstruction of the tubes from the fat, or any other form of deposit, we cannot establish any positive diagnosis from its occurrence. As to any degree of certainty with regard to even the seat of the disease, derivable from peculiarities in the times of vomiting, or in the nature of the matters vomited, I am not sufficiently prepared to speak positively. In two of these cases the patients always vomited early in the morning, previously to getting up, or to the taking of any food. I at one time thought that this might be a means of diagnosing vomiting depending on disease of the kidney from other forms of vomiting, but further experience has satisfied me that this rule does not hold good. We must, therefore, take into consideration all the other circumstances of the case, the history, age, sex of the patient, and particularly the situations to which pain is referred; but even with the most careful examination we shall often be puzzled, particularly in cases where we suspect the brain may be the cause of the vomiting, and yet where the character of the pulse (as occasionally happens) does not afford us sufficient indications, nor have we any other symptoms referable to it, or indeed to any organ in particular, to account for the frequent vomiting."

"As to the treatment of these cases of chronic vomiting, if it occur early in the morning, when the patient is fasting, I have found the most successful plan to be that of making him take some light kind of food before getting up, remaining quiet for a short time afterwards. If it occurs at an early period of the disease, and particularly if pain in the loins is complained of, or even a sensation of weight, three or four ounces of blood taken, by cupping, from that region, affords great relief. I have seen, in some cases, most satisfactory results from the use of equal parts of boiled milk and lime water, given frequently during the day, particularly when diarrhœa was present. In other cases, one, two, or three drops of hydrocyanic acid, combined with three grains of bicarbonate of soda, repeated every three hours, and given immediately before food or drink is taken, proves useful. Creasote, in doses of one or two drops, frequently repeated, is also often of service. In one very bad case, lately admitted into the Meath Hospital, that of a young girl laboring under general anasarca, with constant vomiting and severe diarrhœa, much benefit was derived from the liquor ferri pernitratis, in five-drop doses, four times a day. Occasionally a blister over the stomach, a little brandy, or from twenty to thirty drops of Hoffman's anodyne liquor, will check the vomiting. Some practitioners have recommended the use of opium, but I have not used it, in consequence of the tendency to head symptoms which exists in all cases where the structure of the kidneys is deranged; and as, in many instances, it is difficult to decide whether the symptoms are caused by mere mechanical irritation, or obstruction in the substance of the kidney itself, or whether they depend on the general poisoning of the system, from the retention and circulation in the blood of urea and other excrementitious substances, which ought to pass out of the system with the urine."

On Cod Liver Oil in Phthisis. By Dr. Walshe.—The following conclusions as to the value of the cod-liver oil are taken from the author's recent work on "Diseases of the Lungs." He states:

1. That it more rapidly and effectually induces improvement in the general and local symptoms than any other agent.

2. That its power of *curing* the disease is undetermined. I mean here by curing the disease, its power of causing, along with suspension of progress, such change in the organism generally as shall render the lungs less prone to subsequent outbreaks of tubercles, than after suspension occurring under other agencies.

3. That the mean amount of permanency of the good effects of the oil is undetermined.

4. That it relatively produces more marked effects in the third than in the previous stages.

5. That it increases weight in favorable cases with singular speed, and out of all proportion with the actual quantity taken; that hence it must, in some unknown way, save waste, and render food more readily assimilable.

6. That it sometimes fails to increase weight.

7. That in the great majority of cases where it fails to increase weight, it does little good in other ways.

8. That it does not relieve dyspnœa out of proportion with other symptoms.

9. That the effects traceable to the oil in the most favorable cases, are: increase of weight, suspension of colliquative sweats, improved appetite, diminished cough and expectoration, cessation of sickness, with cough, and gradual disappearance of active physical signs.

10. That in some cases it cannot be taken, because it disagrees with the stomach, impairing the appetite (without itself obviously nourishing,) and causing nausea, or because it produces diarrhœa.

11. That in the former cases it may be made palatable by association with mineral acid, and in the latter prevented from affecting the bowels by association with astringents.

12. That intra-thoracic inflammations and hæmoptysis are contra-indications to its use, but only temporarily so. I have repeatedly given the oil within a day or two after cessation of hæmoptysis, without any return taking place.

13. Diarrhœa, if depending on chronic peritonitis, or secretive change, or small ulcerations in the ilium, is no contra-indication to the use of the oil; even the profuse diarrhœa caused by the ulceration of the large bowel, is not made worse by it.

14. That the good effects of the oil are, *cæteris paribus*, directly as the youth of those using it—a singular fact, which probably may one day (when the textural peculiarities of youth are better understood,) aid in giving a clue to its mode of action.

On the Theory of the Formation of Valvular Diseases of the Heart. By John Simon, Esq., F.R.S.—Mr. Simon regards fibrin not as the nutritive material of the blood, but, with Zimmerman and other phy-

siologists, as the result of the waste of the tissues, or the decay of the blood itself. We may ask, if this is so, why is the quantity of chyle greatest in the thoracic duct, having appeared gradually during the progress of the chyle from the lacteals? No doubt many evils result from excess of fibrin in the blood, as fibrinous concretions in the spleen, liver and kidneys. Mr. Simon even supposes the fibrinous vegetations, on the valves of the heart, so often found in acute rheumatism, and attributed to endocarditis, are owing to this cause; and he asks the important question—How do those valve diseases originate? He answers it as follows:

The general opinion, which till very lately has been unquestioned, is, that the lining membrane inflames, and pours out lymph, (just as the pleura or pericardium might do,) and that thus these vegetations are true *excrescences*, which have arisen in an inflammatory exudation.

Now here, on the threshold of the subject, a doubt occurs—Is the lining membrane of the arterial system susceptible of inflammation?

"Inflammation," in the language of the schools, "consists in an increased action of the bloodvessels of a part." Without pledging ourselves for the accuracy of this definition, we may use it in the present instance as a rough criterion of inflammation; at least negatively. No part can be said to inflame, in the ordinary sense of the word, which has not vessels of its own. You cannot talk of inflammation of the hair or nails. What, then, are the bloodvessels of the lining membrane of the arterial system, which this theory supposes to be the seat of an increased action? That portion of an artery which we term its inner coat, has no bloodvessels of its own, nor do those of the middle or contractile coat (which are derived from the so-called *vasa vasorum*) penetrate to a sufficient depth to influence materially (if at all) the nutrition of the lining membrane.

In the Museum of the College of Surgeons there is a preparation of Mr. Quekett's (an injection done, as all Mr. Quekett's are, with admirable success), which shows how very much the *vasa vasorum* fall short of reaching the lining membrane of the artery. And, if you will but think for a moment, what should *vasa vasorum* do there? what could they convey more fit for the nutrition and growth of the membrane than what is already there?—than that blood, namely, which is already washing over it incessantly and profusely.

And again, gentlemen, reflect on this: the lining membrane of the artery and of the valves has an epithelium; wherever epithelium grows, the old cells drop off in a direction opposite to that whence the new ones derive their materials of growth. Just as our scales of epidermis drop from the surface of our bodies, being nourished and renewed from within, just so, if the epithelium of an artery were renewed from without (*i. e.* by *vasa vasorum*,) the old scales, as fast as they became detached, would drop into the interior of the vessel; and though, no doubt, their decay is very slight, and the number that might thus pass into the circulation, and presently obstruct the capillaries, would be very small, still it would be essentially a clumsy arrangement.

From a variety of reasons, it seems almost certain that the ordinary

nutrition of the lining membrane of the circulating system is derived directly from the blood with which it has contact; and that its morbid changes depend—not on any inflammatory condition due to the *vasa vasorum*, but on those humoral changes, those variations in the qualities of the blood, by which it is more immediately and more certainly affected than any tissue of the body.

On these grounds there would be great *primâ facie* difficulty in believing that the endocardial deposits could be of inflammatory origin. But this is not all; for if they were inflammatory exudations, why should they be so peculiarly limited to projecting or uneven surfaces of the lining membrane? And why should they evince so decided a preference for the *left* side of the heart? Both sides of the heart, and all points of each cavity, are, (one would think) equally exposed to the causes of inflammation; the coronary arteries supply both ventricles of the heart indifferently, and we well know that acute *peri*-carditis pays no respect to the grooves and septum of the heart; it traverses all such lines of demarcation, injects the blood-vessels of right and left side alike, and covers ventricles and auricles equally with its dense inflammatory exudation. On the supposition that these vegetations are inflammatory effusions from the membrane, I should be quite unable to explain why they should almost entirely confine themselves, as they do, to the valvular apparatus; and why their predilection for the left side should be so great, that the right is very rarely affected—perhaps never, except where the left has first suffered, and where the disease has been of such extreme intensity, that even its weaker affinity for the right side has been able to manifest itself.

The opposite doctrine is the more tenable one. I believe that the origin of these vegetations is directly humoral; that they arise as fibrinous precipitations from an overcharged solution; the valves encrusting themselves with fibrin, just as a stick in certain streams coats itself with a calcareous envelope; and that the preference shown for the left side of the heart admits of explanation by reference to the peculiarities of its contents—the new-made arterial blood.

You will observe that this theory involves the supposition, that arterial blood is more prone than venous blood to precipitate its fibrin, either as containing more of it, or as containing it in some more separable form.

Not wishing to leave this matter of uncertainty, I have experimented on the subject. I have carried a single thread, by means of a very fine needle, transversely through the artery and vein of a dog, leaving it there so that it might cut the stream; and I have done this repeatedly, sometimes in the femoral vessels, sometimes with the carotid and jugular, sometimes with the aorta and cava. I have suffered the thread to remain during a period of from twelve to twenty-four hours. My experiments have given me as a uniform result, that the arterial blood with the utmost readiness deposits its fibrin on the thread; the venous blood with the utmost reluctancy. And in most of my experiments, the thread, where it traversed the canal of the artery, presented a very considerable vegetation on its surface (exactly like those we are talking of on the valves of the heart;) a vegetation sometimes as large as a grain of wheat;

always of a pyramidal shape, with its apex down-stream, and its base attached to the thread. In the artery, one might say that the thread whipped the blood, just as one whips blood in a basin to get the fibrin out of it; but with this trifling difference, that, instead of the rod beating the fluid, the fluid ran over the rod and precipitated its fibrin there. In the vein the thread seemed to operate no way but obstructively; never coating itself with fibrin, but sometimes delaying or stopping the circulation with a voluminous black clot, chiefly collected on that side of the thread remotest from the heart. Accordingly, the general statement and rationale of the matter appears to be as follows: The disease in which these deposits are so frequent is one of intense over-fibrination of the blood, and one in which almost certainly there are other conditions, besides *quantity*, making the fibrin easy of precipitation; the left side of the heart has preference, because it is the arterial side, and because arterial blood, as we have seen, readily parts with its fibrin; the valves, and particularly their streamward surfaces, are chosen for the deposit, because their position exposes them chiefly to the friction of the current; so that the whole curious selection of site for the deposit resolves itself into the concurrence of two conditions, which are fulfilled in that one spot of the vascular system—namely, the greatest chemical tendency to the deposition of fibrin, with the greatest mechanical facilities for its entanglement.

In introducing this subject, I mentioned that it is one of great practical importance. Many people bleed locally, or even generally, when they hear an endocardial murmur arising in the course of rheumatic fever. In their eyes, the new disease is endocarditis; and everything ending in *itis* is thought, in at least a majority of instances, to be benefitted by bleeding. Therefore do not be in a hurry to call it endocarditis; and as for bleeding, all that I would venture to say (for of course the treatment of this physician's disease does not fall within my province) is to assure you of the pathological fact, that you may bleed a patient to death without altering (except probably to increase) the proportion of fibrin in his blood.—*London Journal of Medicine.*

Report on Sweating Sickness.—M. J. Guerin, in the name of a commission composed of MM. Dubois, Melier, Martin-Solon, Bricheteau, and and Guerin, read an elaborate report on a series of documents transmitted to the Academy respecting the epidemic sweating sickness of 1849. After some general observations upon epidemics, the reporters discussed the facts and inferences contained in these documents by propounding a series of questions.

1st. Does the *sweating sickness* of 1849 resemble preceding epidemics? After reviewing the history of this disease, from the scattered and imperfect notices thereof in the writings of Galen and of Cælius Aurelianus, down to the first unequivocal account of the disease in 1465, the reporters compare the English sweating sickness with the same malady as it appeared in Picardy in 1655, and then with the epidemic that has at different times made its appearance in various parts of France, and last in the year 1849. The result of this comparative examination is, that the epi-

demic of 1849 is but a milder form of the English sweating sickness of the middle ages, and is also identical with the several epidemics that have occurred in France since the year 1712.

2d. Has the epidemic of 1849 reappeared in districts that it had formerly visited? Has it spared some places in which it had previously occurred, and then after a time reappeared? On these points data are yet wanting.

3d. Has the epidemic of 1849 manifested characters similar to those of its predecessors? The answer to this question demands data whereon to determine whether, although fundamentally identical with preceding epidemics, this of 1849 has presented the same forms as those: whether, in the course of the disease, it has assumed different forms; whether it has presented the same form in the different provinces, or in different places of the same province; lastly, whether the same epidemic, during the same period, and in the same localities, has presented sufficiently distinct characters to have constituted distinct types. None of the reports that have been received furnish the necessary information upon these points, although up to a certain point they supply data. The results of treatment would in a great measure assist in the resolution of this question. Here, however, the diversity and even opposition of opinions leave the inference that nervous systems have predominated, and have varied with local or originating causes. The course of this epidemic, like that of cholera, was marked by a diminished severity in the attacks towards its decline; so that from being at first severe and fatal, they became slight and unattended with danger. The diversity of opinion on the subjects of infection and of treatment, and the varieties observed in the symptoms described, present the disease under different forms, but do not supply sufficiently accurate data for the determination of the distinctness of type in different localities.

4th. Have the reports now submitted to the commission added anything to the characteristics of the sweating sickness? In considering this point the reporters confine their observations principally to the subject of the mode of propagation of the malady. It does not appear that the documents hitherto received afford the determination of this point. Some observers affirm absolutely its contagiousness; others explicitly deny this property. One physician states that those only who had long resided in the district where the disease appeared were liable to its attacks; that strangers were exempt. This fact, the reporters observe, is analogous to what is recorded by historians of the disease in Calais, whither *it was imported by the English*, and where it was confined to the English inhabitants; whence its name of English sweating sickness.

5th. What is the nature of the epidemic of 1849? Some of the authors speak of a change in the nature of the disease: upon this the commissioners observe that the nature of the disease must remain unaltered, although its manifestations may be modified by circumstances. Opinions are divided into those which regard the disease as inflammatory, and those which regard it as a septic malady, involving at once the whole mass of circulating fluids. Of the six reports now under notice, not one

speaks of the disease as inflammatory (gastritis), but unanimously look upon it as septic.

6th. What treatment has prevailed in the epidemic of 1849, and what progress has the study of the therapeutic relations of the disease impressed upon its history? The treatment of sweating sickness is far from fixed; bleeding, antiperiodics, and evacuants, have all been used with varying success. Some have vaunted the success of depletion, while others have deplored the fatal effects of that measure; some have cured their patients with quinine, others by the employment of emetics. These opposing statements are only reconcilable by assuming variations in the period or characters of the epidemic. One report speaks of six hundred cases cured by bleeding; another records the cure of one thousand by emetics of ipecacuanha; a third gives uniform success to the combination of quinine with purgatives. The majority of cures have been obtained in various hands by emetics; but the commissioners observe that it cannot yet be asserted that ipecacuanha is the specific remedy for sweating sickness.—*London Medical Gazette.*

Tumour compressing the right side of the Medulla Oblongata and the nerves proceeding from it.—This case was related to the Society of Biology in Paris, on March 15th, by M. Charcot.

Case.—The patient, a woman aged 48, was admitted into the Charity Hospital on February 28. She had been ill three months; and at first was under the care of M. Gubler. He was called to her a fortnight after the appearance of violent pain in the occipito-temporal region. The neck was slightly tender on pressure; the organs of sense were very susceptible; and every movement of the body brought on attempts to vomit, sometimes followed by a discharge. The pupil was much contracted; and there was obstinate constipation; but no distension or tenderness of the abdomen. The tongue was rather white, but moist; the pulse was not frequent; the skin was not hot. There was no pain in the trunk or limbs, nor paralysis, vertigo, or convulsions. Mr. Gubler diagnosed a superficial circumscribed softening of the grey matter, or rather an intracranial tumour. He applied leeches behind each ear, gave a calomel purgative, and ordered chloroform to be applied locally to calm the cephalalgia. Considerable relief ensued: but the patient was removed by her son two days after. She soon began to manifest great hebetude, and weakness in all her limbs, without pain; and at last her speech became very remarkably impaired. The cephalalgia soon became as severe as before. A seton was applied to the neck, and blisters to the thighs, but without effect; and she was admitted into hospital.

On admission, she answered questions pretty readily, but soon shewed how much her intellect was weakened and perverted. She complained of very severe pains in the cerebellar region: the head was constantly turned towards the right shoulder, but there was no rigidity or contraction of the muscles of the neck. All her limbs were relaxed; but she moved her legs and arms without much difficulty, when desired to do so. When pinched, she felt it readily. There was no strabismus,

ptosis, or deafness. The pupils were equally dilated. She had never vertigo, muscæ volitantes, or noises in the ears. There were no signs of paralysis of the facial nerve. She protruded her tongue readily; but the point was immediately carried to the right. She could, however, easily turn it in her mouth, and could turn the point to the left when desired to do so. The movements of deglutition were perfect. The vomiting and constipation continued as long as the patient was in the hospital. A kind of coma supervened, and the patient died on March 9th: she never had convulsions.

From the symptoms it seemed probable that there was a tumor compressing the ninth nerve; but there were no symptoms of syphilis, tubercles or cancer. On post-mortem examination, a tumor, of the size and shape of a large pigeon's egg, was found on the front of the right lobe of the cerebellum, where it had formed a hollow. It also compressed the right peduncle of the brain, and pushed the medulla oblongata towards the left side. It had flattened the auditory, facial, pneumogastric, glosso-pharyngeal, and especially the hypoglossal nerves on the right side. The fifth pair was also much flattened. The third and sixth nerves were untouched. The tumor was very feebly adherent, and was easily removed by tearing some very loose cellular tissue. It was hard and dry, and grated under the scalpel: it was somewhat mammillated. Examined with the microscope, it presented fibro-plastic tissue, with a predominance of the fibrous tissue.—*Lond. Journ. of Med.*

ANATOMY AND PHYSIOLOGY.

On the Reunion of Wounds of the Spinal Cord, with Restoration of its lost Functions. By M. Brown-Sequard.—During the last three years, M. Brown-Sequard has made a considerable number of experiments, with a view of determining the degree of reparative power which exists in the Spinal Cord; the results of which are very remarkable. The following is one of the most striking:—The spinal cord of a Pigeon was *entirely divided* between the 5th and 6th dorsal vertebræ; and the operation was followed by complete paralysis of the posterior part of the body, as regarded sensibility and voluntary movement. At the end of three months, voluntary movements began to show themselves, in the midst of reflex actions; and sensibility also reappeared. These powers gradually augmented; and six months after the operation, the bird could stand for some minutes, but fell if it attempted to walk. In the course of the seventh month it began to walk, but unsteadily, helping itself by its wings. By the end of the eighth month, it could walk slowly without support; but if it attempted to walk fast, it fell over, unless it supported itself by its wings. Twelve months after the operation, it could run; and when the account of the case was drawn up, fifteen months after the section had been made, its progression seemed in all respects normal, save that a certain degree of stiffness remained in its gait.

In several Guinea-pigs, in which the section had only been made through one half of the spinal cord, an incomplete return of voluntary power was observed within seven or eight months after the operation. In the case of one Guinea-pig, which had been subjected to this operation a year before, and in which sensibility appeared to have been completely restored, and voluntary movement less completely, a careful examination was made of the injured part. It was found that the section had traversed both the posterior columns, as well as the anterior and lateral columns, and a portion of the grey substance on the right side; all of which parts exhibited a sort of contraction, the continuity of the divided parts being re-established by a whitish cicatrix. On examining the substance of this cicatrix, it was found to be in great part made up of fibres of areolar tissue, the direction of which was transverse or oblique; but these were crossed by great numbers of nerve-fibres running in a longitudinal direction, which exhibited a double contour, and were uninterruptedly continuous through the whole extent of the cicatrix. Among these were scattered some ganglionic corpuscles. A like reproduction of nerve-fibres in the cicatrix of the spinal cord, has been substantiated by M. Brown-Sequard in two other cases.—*Brit. and For. Review, Oct.* 1851, *from Gazette Médicale.*

On the Distribution of the Blood-vessels in the Mucous Membrane of the Stomach. By HENRY FREY.—The distribution of the blood-vessels in the gastric mucous membrane has an interesting relation to its double function; for the vessels of the surface, which are those most concerned in absorption, are veins, and have a large diameter; whilst those of the deeper portions of the membrane, which are subservient to secretion, are arteries, which form very delicate net-works around the gastric follicles.—*Ibid, from Henle and Pfeufer's Zeitschrift.*

On the Post-mortem Duration of the Ciliary Movements in the Human Subject. By M. GOSSELIN.—The body of a decapitated criminal having been conveyed to the Ecole Pratique, the ciliary movement was recognized on the mucous membrane of the trachea, of the nasal fossæ, and on that lining the maxillary, frontal, and sphenoidal sinuses, eight hours after death. The movements were still distinguishable, especially on the mucous membrane of the trachea, 32 hours after death. The movement had ceased on the mucous membrane of the nasal fossæ and of the sinuses, 56 hours after death; but this was perhaps due to the free exposure of these parts to the air; for the vibration was still active on the mucous membrane of the trachea, where it was distinctly seen to the 168th hour after death, after which putrefaction came on, and the movement ceased. In another case of the same nature, the ciliary movements were much less durable; and this seemed to be consequent upon the earlier supervention of putrefaction, brought about by a higher temperature, the thermometer having ranged from 46° to 54° in the first and having risen to 68° in the second.—*Ibid, from Gazette Médicale.*

The Physiological Effects of Ascending to great Heights.—M. Payerne, of Cherbourgh, communicated observations which tended to prove that the feelings of lassitude and dyspnœa, which are experienced on ascending high mountains, are not attributable to an excess of oxygen in the air inspired as some physiologists have thought. M. Payerne has observed precisely the same effects produced under circumstances diametrically opposite; *i. e.* in descending under the water to the depth of forty-one metres (=44·838 yards.) M. Payerne stated that he had effected the descent by three different means, viz. by the ordinary diving-bell, by a diving bell that he had himself contrived, and in his sub-marine ship. In these several apparatus the auditory nerve had been differently affected. The first caused a disagreeable, almost painful, sensation during the period of submersion; the second produced similar effects only in descending or ascending; and the third, during the time requisite to establish the equilibrium with the medium in which he was thus placed. Under other points of view, the consequences were identical.

The author thus stated the results:—At thirty metres (=32·808 yds.) of depth of water, provided the temperature of the atmosphere respired did not exceed 10° Cent. (=50° Fahr.,) and at even less than this depth, with a higher temperature of the air, the workmen are obliged to rest from their work more frequently than when in the open air; and their arterial pulsations are notably increased. The descent and continuance under water do not give rise to hæmorrhages, but the returning to the surface in diving-bells, and the escape of the compressed air from the sub-marine boat on opening its doors to return to the ordinary atmosphere, have been known to be followed by epistaxis in some persons. In these cases, however, the hæmorrhage was not of the usual character, *i. e.* consisting of drops of blood of a more or less florid color, but it was a mere oozing of a saffron-colored fluid, thinner than blood,—a simple exudation, without rupture of the capilliaries. It could not be supposed that these effects were attributable to an insufficiency of oxygen, since a volume of air is condensed in proportion to the pressure to which it is subjected. At the greatest heights that have yet been reached, the air has still its relative proportion of oxygen.

M. Payerne added, that at small depths, *e. g.* a metre, a cubic metre of air will suffice for the respiration of four men, and it has even sufficed for five men, during one hour, and oxygen still remained.

The lassitude and dyspnœa which are experienced at great heights, are owing, according to M. Payerne, to a disturbance of the equilibrium between the tension of the fluids contained in our organs, and that of the circumambient atmosphere.—*Lon. Med. Gaz.*

THE

MEDICAL EXAMINER,

AND

RECORD OF MEDICAL SCIENCE.

NEW SERIES.—NO. LXXXIV.—DECEMBER, 1851.

ORIGINAL COMMUNICATIONS.

Microscopical Observations of Tumors. By JOHN H. BRINTON, of Philadelphia.

Cancer is to be met with in almost every portion of the human frame, we find it involving alike skin, mucous membrane, muscles, fibrous tissue, and nerve, and even deposited in the medullary cavities of the bones. If then the question be put, what are the elements of a cancerous tumor, the answer must be a general one: the cells of cancer infiltrated into the minute structure of any tissue. In examining therefore any suspected growth, it becomes necessary for us to bear constantly in mind the appearances presented by the part, not only in a state of health, but also when affected by any other disease, which may yet be foreign to cancer. Let us glance for a moment at the various kinds of cells which may meet the view of the microscopist in his pathological examinations, and which, unless the character of each be carefully studied, may easily be confounded with those of cancer. We have the epithelial cell, the fusiform and the car-

tilage cell, the compound granular cell as described by Bennett, fat vesicles, glandular cells, and the pus cell. The difference between these various cells, and those of cancer, will be described as they present themselves in each case. We have already seen in case number two, (in the preceding number of this Journal,) the fusiform corpuscle as met with, when going to the formation of fibres, and in the same case we have also represented the fat vesicles as they ordinarily appear.

How common is it to hear such remarks as the following from those who are called, to use a common phrase, "unbelievers in the microscope." "You say this is cancer; what is your standard of cancer, whence is it derived, and what are your data? Have you any? or has it been arbitrarily assumed, that this is cancer, and that is not?" Now these are natural questions, and should be answered. The only true and practical standard of cancer, is that deduced from the careful and continued examination of such cases whose malignancy is undoubted; those cases which destroy life, either directly, or by returning after repeated extirpation. Now it will be found, that all those who have made this subject practically their study, will, as the result of their own investigations, establish for themselves a standard of their own; and moreover, if the results of all experienced modern observers be compared together, it will be evident that although they may differ in minutiæ, they still agree on the main, important, and practical points. Cancerous tumors may be arranged for the convenience of study into three great classes; first, the scirrhus or hard cancer; second, the encephaloid or soft cancer; and third, the colloid or gelatiniform cancer; the first two forms seeming to differ from each other merely in the presence of a greater or less proportion of fibrous tissue; many fibres and few cells constituting scirrhus; few fibres and many cells forming encephaloid. Scirrhus can not be distinguished from fibrous tumors by the unassisted eye; in reality scirrhus is only a fibrous tumor, with one element superadded, and that element is the cells of cancer; the arrangement of these cells is peculiar, they may either be infiltrated between the fibres, or else be gathered together in cysts, as will be seen in the case about to be described.

In encephaloid, the cells are in great abundance; and in consequence, the proportionate absence of fibrous tissue, renders the

whole tumor much softer, approaching in truth as its name imports, to a brain-like consistency.

Schirrus and encephaloid may exist together, or rather scirrhus has a natural tendency to pass into encephaloid, by the more rapid developement of cells; so that we often find both of these forms of cancer united in one and the same tumor.

The synonymes of scirrhus are carcinomatous sarcoma, scirrhoma, fibrous cancer, and stone cancer; those of encephaloid, are medullary sarcoma, fungoid sarcoma, cerebriform cancer, soft cancer, spongy carcinoma, and many others too numerous to mention. While colloid cancer is described by writers as gelatiniform cancer, and areolar or gum cancer.

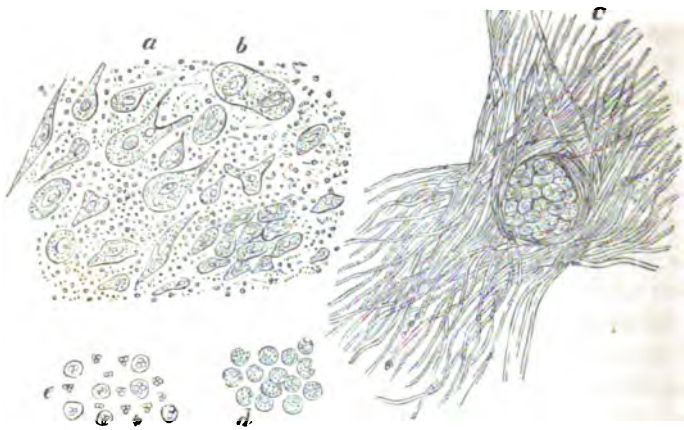
Of the whole class of cancers there are none that set more completely at defiance the skill of the surgeon, than those which are located in the uterus and ovaries; it is true that some years ago we had numerous French statistics of operations, which lessened much the mortality attending cases of carcinoma uteri; but further investigation sufficed to show that some error must have existed in the preparation of such statistics; and now, universally, cancers of the uterus are still considered as indomitable as before.

I have therefore selected the following case of carcinoma uteri, as one every way fitted to be the representative of a great class; it occurred in the practice of Dr. Bibighaus, of this city; who kindly furnished me with the specimen, and the following particulars.

Mrs. P., æt. 56, a widow, and the mother of several children; has been ill for several years, complaining of vague abdominal pains, feelings of lassitude, and all the other symptoms characteristic of uterine disease. During the year previous to her death, which took place in March last, the epigastric pains increased, becoming of a lancinating character; general derangement of the primæ viæ took place; the stomach sympathized to a marked degree with the uterus; constant vomiting occurred, and the patient finally sank. During all this period discharges of blood similar to the catameniæ occurred, although at irregular intervals. Upon post mortem examination, the thoracic organs were found healthy, as also were the intestines, liver, and kidneys, of both sides. The ovaries were enlarged, the fallopian

tube of the right side had ulcerated off from the uterus, while a considerable deposit had taken place in that of the left side; the fundus of the uterus was much enlarged, and on its posterior portion softened, and infiltrated with a thick viscid fluid, of a dirty brown color, which could easily be squeezed out, by making pressure between the fingers. The os uteri was open and distended, its margins ragged and ulcerated; the cavity of the uterus was also enlarged, and was filled with a thick, greenish, fluid, fetid pus. The upper portion of the vagina was much ulcerated.

Fig. 3.



a. Cancer cells from uterus magnified 200 diameters.
b. Parent cell.
c. Cyst in fibrous tissue, filled with cells.
d. Pus corpuscles.
e. Action of Acetic acid on same.

Upon squeezing out from the cut fundus uteri, a portion of the viscid fluid it contained, and submitting it to the microscope, I found it to present the appearance shown at figure 3; numerous cells were to be observed, varying greatly in their shape and size, some being round, some oval, and others broad and flat, with a swallow-tailed extremity; these cells were larger than those occurring in most cases of cancer, except in those of rapid developement, or in an advanced stage; they measure from the 1-900th to the 1-2000th part of an inch in diameter, and were all possessed of an oval nucleus about the 1-3500th part of an

inch in length, the nucleus varied however in proportion to the size of the cell; a number of the cells possessed in addition a nucleolus, appearing merely as a granule in the interior of the nucleus. These cells all floated as it were in a sea of granular matter. I observed also several parent cells, the mother cells of the German writers. (See *b*, fig. 3.) Two, three, four, and even more true cancer cells may often be distinguished in the interior of a parent cell. These mother cells are never met with except in cancers in an advanced state, or of rapid growth; by some they are supposed to split, so liberating the enclosed cancer cells. This, however, is merely an hypothesis, and has not yet been clearly proved. Many of the books lay down as a rule, that the parent cells which enclose in their interior the young, or daughter cells, are characteristic of encephaloid. Concerning this, Vögel, one of the earlier writers on this subject says, "that while he has not often seen these cells in other forms of cancer, still he cannot affirm that they always occur even in encephaloid." Upon examining the more solid parts of the fundus uteri, cysts filled with cancer cells were to be seen, occurring in the fibrous stroma of the uterus. (*c*.) These cysts were about the 1-500th part of an inch in diameter, and of about the same depth, and were formed by the interlacement of the fibres of the ordinary white fibrous tissue. The cells filling these cysts, could, when carefully examined, be seen to be possessed of nuclei. Compared with the other cells, they were however of small size, being only about the 1-2500th part of an inch in diameter.

At fig. 3, (*d*) I have represented the appearance of the pus cells, as met with in the cavity of the uterus. Pus is composed of two portions—pus corpuscles, or cells, and a liquor puris, resembling much the serum of the blood, in which the cells swim. The pus corpuscle varies in size, from the 1-2000th to the 1-3000th part of an inch in diameter, its medium size may be said to be about the 1-2500th part of an inch in diameter, that is about double the size of the corpuscle of the human blood; it is spherical, with a well defined and finely marked edge, and presents internally a granular appearance; by the addition of water the corpuscle increases in size, the water entering by endosmosis. Concentrated acetic acid dissolves instantly the cell wall, and brings into view a nucleus which is not visible in the corpuscle, unless

under chemical action; this nucleus consists of two, three or four granules apparently connected together, (*e*, fig. 3.) How, then, do we distinguish the pus corpuscle from the cancer cell? The first is always globular, granular, and, unless acted upon chemically, presents no nucleus, and this nucleus, when so obtained, is peculiar to pus, and characteristic; the cell of cancer is generally much larger than the pus cell, is not often round, varies much in its shape, and presents an oval nucleus. Pus is sometimes confounded with mucous, but it has always seemed to me that the corpuscles of mucus are much larger than those of pus; and the chemical action of acetic acid upon them is by no means so perfect; the mucous corpuscles have a tendency to collect together, forming conglomerate masses, and their outline is granular and less finely marked than is that of the pus cell. With ordinary care it is possible to distinguish them apart with a tolerable degree of certainty.

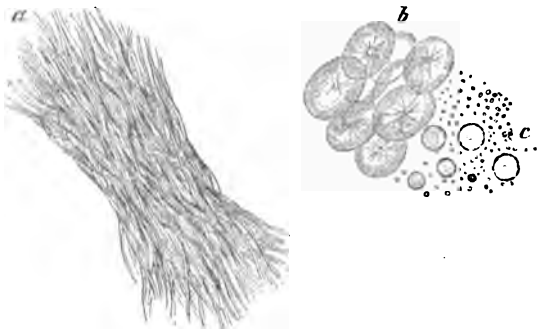
CASE 4.—The history of this case, which was kindly furnished to me by Dr. Jno. Wilson Moore, in whose practice it occurred, is the following:

E. G. M., æt. 48, unmarried, had experienced for several months prior to last June, occasional pains in the right breast; about the commencement of that month, a hard lump could be felt on examination, which gradually enlarged until the early part of July, when it was removed by Dr. Pancoast. The wound healed kindly, and the patient is now entirely recovered.

The breast, when removed, was of a medium size, and seemed to consist of a hard fibrous tumor, enveloped in a thick layer of fat, presenting to the view internally numerous dense nodulated bodies, of an almost cartilaginous consistency, crunching under the knife when cut; several cysts were also seen filled with a thick, oily fluid, varying in color from a dirty brown to a purplish hue; these cysts were of different sizes, some being as large as a pea, and others double or treble that size. A section made completely through the tumor, from without, revealed the following structures: Next to the skin a thick layer of fat; then a hard, flattened, fibrous mass; then the dense nodulated bodies above alluded to; and lastly, a layer of tissue, somewhat hard in its character, and apparently fibrous, containing the cysts.

The layer of hardened tissue immediately subjacent to the superficial fascia, proved, when examined by the microscope, to be fibrous; the fibres interlacing closely one with another. By the addition of acetic acid the whole mass was rendered transparent, and scattered throughout might be seen numerous elongated oval nuclei, about the 1-1500th part of an inch in length, and about the 1-4000th part of an inch in breadth. (See fig. 4, *a*.)

Fig. 4.



a. Fibrous structure, showing oval nuclei from tumour of the breast, after the addition of acetic acid; magnified 220 diameters.

b. Fat vesicles, showing crystals of margaric acid.

c. Oil globules, and granular matter.

The nodulated masses presented the same fibrous appearance; no nuclei, however, could be detected even after the addition of acetic acid. The mass in which the cysts occurred, and which was situated directly above the great pectoral muscle, proved, upon examination, to be composed of merely condensed, adipose tissue; the fat vesicles being flattened, and arranged in laminæ, one upon another; giving the whole a somewhat fibrous appearance. Many of the fat vesicles contained crystalline, stellated nuclei, of margaric acid. (See fig. 4, *b*.) I use the term nuclei, although strictly speaking, it is hardly a proper expression, inasmuch as these crystals are deposited subsequently to the formation of the vesicle, and in reality have nothing whatever to do with the production of the walls of the cell. In some instances, the crystals seemed to be deposited on the external surface of

the cell wall. The cysts, which were filled with an oily fluid, were surrounded by fibrous walls, and I was not able to detect, after the most careful examination, any vestige of a secreting, lining, epithelial membrane. The contents of the cysts consisted chiefly of oil globules; but there was also a considerable quantity of granular matter. (Fig. 4, *c.*)

The substance of the mammary gland seemed to have been almost entirely absorbed; very few of the glandular cells could be detected, and those were situated only in the anterior portion of the breast; in this region the galactophorous tubes remained in a healthy condition.

An analogy has been pointed out by some of the late German pathologists, between cirrhosis of the liver, and that condition of the mammary gland which we have just seen, in which we have great and hypertrophic development of the fibrous sheath of the gland; this sheath covering not only the external surface, but also sending in throughout the whole gland, prolongations of thick membraneous fascia, permeating its substance in the same manner as the capsule of Glisson does that of the liver. The same causes acting upon analogous tissues, will produce like results; the development of a fibrous tumor causing atrophy and absorption, more or less complete, of either gland.

The occurrence of the peculiar oily cysts is a circumstance admitting of by no means an easy explanation. It is no uncommon thing to meet with cysts full of oily contents, formed by the dilatation of the galactophorous tubes; but this was not the case in this instance: here the cysts were situated at the deepest seated portion of the tumor, and were entirely insulated, and appeared to be destitute of any epithelial lining membrane. Is it not possible for these cysts to have been produced mechanically, by the pressure of a superincumbent fibrous mass, upon a layer of adipose tissue, resting against the anterior wall of the thorax, so causing the rupture of the fat vesicles, and allowing the free oil globules to escape? We know that such will be the case, if the fat vesicles be compressed under the field of the microscope, between two plates of glass; and it can easily be conceived possible, that sufficient pressure should be produced by the tension of the integuments, transmitted downwards, through a hard, resisting, fibrous tumor. And if we

add to this, the expansive force of a rapidly developing fibrous growth, it seems to me that we have causes quite sufficient to produce the results which in this case we have seen were effected.

Acetate of Lead in Epistaxis. By D. H. Agnew, M. D., of Philadelphia.

During the month of November, 1850, I was called to see Mr. N., who, with the exception of a very short interval, had been bleeding from the nose for four hours. No probable cause could be ascribed for the attack. When I saw him first, the blood was flowing quite rapidly from the nostrils, showing no disposition to coagulate. He complained of a sense of tightness across the forehead (not amounting to pain.) The pulse, though small and quick, possessed a degree of firmness, which, taken together with other symptoms, induced me to believe the discharge to be dependent upon some temporary congestion of the vessels of the head. In accordance with this view of the case, the arm was tied up, and a quantity of blood, sufficiently large to make a decided impression upon the general system, abstracted; the head and shoulders elevated; cold applications to the former; a warm stimulating pediluvium, with directions to draw into the nostrils occasionally a solution of sulphate of zinc, and alum. This treatment, though it had the effect of diminishing for a short time the hemorrhage, failed entirely in arresting it, and before the lapse of an hour, the flow became as great as at the commencement of the attack. The patient now began to feel the loss of blood very much, the pulse failed, the face became pallid, and the nervous system excessively agitated. It was now proposed to plug the nostrils, preparatory to any other measures for relief, but to this the patient obstinately objected. At this time the acetate of lead was suggested, from its known efficacy in controlling hemorrhages from other parts. Ten grains were immediately administered in a little acetic acid, with directions to take a second powder, containing five grains, two hours and a half subsequently. Before the period came round for taking the second dose, the discharge had materially diminished, notwithstanding which it was given; and an hour following, it had entirely subsided. The rationale of its operation

seemed in this case to be beautifully and strikingly exemplified. The first effect was its sedative influence over the circulating system, apparent by the rapid diminution in the frequency of the pulse. Second, its sympathetic action, (as I believe,) through the medium of the nervous system upon the calibre of the capillary vessels of the Schneiderian membrane lining the nasal cavities, obvious in the diminution of the flow. And, lastly, its effect upon the sanguine fluid itself, by increasing its coagulability. As a remedy in the different forms of profluvia, its value is well known to the profession; yet we think more decided results would be obtained, were it administered in much larger doses than are usually recommended. I would not encourage the idea that caution in its use is unnecessary, though I do think the danger from its free employment greatly exaggerated. While writing, a case of uterine hemorrhage occurs to me, where a fifteen grains dose of the acetate of lead effectually arrested the discharge, and saved the patient's life, after the failure of every other resource, the lead among the rest, though exhibited in small doses. The precautionary measure of administering the article with acetic acid, has not been neglected; and perhaps it is by thus preventing its conversion into the carbonate, that no ill results have been witnessed. Seeing no similar therapeutical application of this agent, it is reported, in order that it may receive a further trial.

A New Method of Whitening Bones. By ELLERSLIE WALLACE, M. D., Demonstrator of Anatomy in Jefferson Medical College, Philadelphia.

To the Editors of the Medical Examiner.

Gentlemen,—During the past year, I have used sulphuric ether for the purpose of extracting the greasy matters from bones of which I have desired to make preparations, and have uniformly found it entirely satisfactory. I have used it for entire skeletons where they have been of value.

Twenty-five or thirty pounds of ether (which can be obtained for 18 cts. per lb.,) is enough for a skeleton, if the bones be closely packed in a proper case. After pouring the ether on them until they

are entirely covered, they may be left for some hours, or a day; then removing them, they should be allowed to dry thoroughly. This process should be repeated as often as may be necessary.

Six immersions have been enough for a very greasy skeleton. It is prudent to wash the ether before using it, to remove free acid, and we may have the ether re-distilled after it is saturated with the oil. To morbid specimens, as of caries, &c., it is admirably adapted, as it removes the grease entirely, without injuring the delicate structure at all, which is not the case, as we all know, with any of the ordinary alkaline solutions.

Very truly, yours, ELLERSLIE WALLACE.

92 *S. 11th St., Nov. 1st*, 1851.

Microscopic Observations respecting Arterial and Capillary Circulation. By J. H. WYTHES, M. D., of Paoli, Chester Co., Pennsylvania.

It will be readily acknowledged by most physiologists, that the movement of the blood in the capillaries, is to a great extent independent of the action of the heart, since it may continue after the cessation of the heart's action is affected by causes originating in the capillaries themselves, and is present in the vascular area before the development of the heart. The capillary vessels, however, exhibit no obvious movement when examined by the microscope; the blood passing through them in a continuous stream. Now as the only method in which the capillaries could influence the current of blood, is by a peristaltic or pulsatory motion, and as such motion is not observable in them, it seems probable either that their influence has been over-rated, or that the cause and manner of their operation is yet undiscovered.

The arteries, on the contrary, are known to possess both elasticity and contractility. The former of these properties is generally considered to be of a purely physical character, serving to convert the intermittent impulses the blood receives from the heart into a continuous current. The contractility of the middle arterial coat is thought to be a vital property, similar to muscular contractility. A modification of this force is termed tonicity, an

example of which is seen in the arrest of hemorrhage by the contraction ensuing on the division of an artery.

The pulsations of the arteries, however, have been regarded as caused by the alternate contraction and dilatation of the heart, and to be equalizing and retarding, rather than propulsive, in their influence on the vital current. Yet physiologists have been inclined to attribute some propulsive influence, supplementary to the heart's action, to the arterial coats. Dr. Carpenter remarks, "If the fibrous coat of the arteries is in some degree disposed to the alternate contraction and relaxation which are so remarkable in the heart, they *may* exert a force which shall be supplementary to that of the heart's impulse, relaxing to receive the blood from it, and contracting upon their contents, with a power superior to that by which they were distended. It is difficult to say whether or not this be the case, though there would certainly appear some evidence in favor of the supposition. The loss of the heart's power over the currents of blood, in proportion to their degree of subdivision, occasioned by the increased friction to which they will be subjected, would seem to require some compensating power, in order that the perfect equality of pressure may be obtained which has been spoken of as existing in all parts of the arterial system. In no other way than this can the fibrous coat of the arteries be regarded as having any propulsive power over their contents, except by a peristaltic or vermicular movement, resembling that which takes place in the alimentary canal; and of such there is no evidence whatever."

It is evident that Dr. Carpenter regards the contraction of an artery upon its contents, to be owing to the stimulus afforded by its distension with blood, which being expended, the vessel is ready to dilate to receive a new supply. The microscopic observation to which we are about to refer, leads the writer of this article to entertain a different view. It seems to be demonstrated by this that the pulsatory movement is a property residing in the arterial coats themselves, independent alike of the heart's action and the stimulus of the blood.

Having caught a mouse in a trap, (it was quite cold and stiff when taken out,) I was desirous of making some preparations of epithelium, &c. On taking out the kidneys it occurred to me to place a thin slice upon a slide for microscopic examination. The

slice was made quite through the middle of the kidney, and was about one-thirtieth of an inch in thickness, just thick enough to be translucent. On placing it under the microscope, one of the largest vessels was observed in active motion, alternately contracting and dilating, with evident vermicular contortions, communicating motion to the blood corpuscles in the capillaries for a considerable distance. The movement seemed limited to the artery, and was not communicated to the coats of the capillaries, although their contents had an oscillatory motion corresponding to the contents of the artery. The phenomenon was seen for about three hours, when the observation was suspended. The motion had then considerably diminished both in extent and energy.

I was at first inclined to attribute this activity to evaporation of the watery particles from the slide, but this is insufficient to account for the regular pulsatory character of the movement. It is therefore due, in all probability, to the vital pulsations of the coats of the artery. I have not had an opportunity since that time to repeat the experiment.

The only parallel case with which I am acquainted, is recorded in Hassall's Microscopic Anatomy, as follows:—"On one occasion, in examining the tongue of a frog, a portion of it broke away from the remainder; this I placed between two plates of glass, and submitted to examination, when, extraordinary to say, it was perceived that the circulation was still vigorously maintained in the majority of the vessels. Anxious to know how long this circulation would be continued, but fully expecting to see it cease every moment, myself and a friend, John Coppin, Esq., of Lincoln's Inn, watched it for upwards of an hour, at the end of which time the blood still flowed onwards in many of the vessels, with scarcely abated vigour, though in others, often the larger ones, the motion had altogether ceased. The mutilated portion of the tongue was then placed in water, in which it remained during the whole of the night; the next morning it was again examined, when it was found that a tolerably active circulation still existed in several of the smaller vessels. After this observation, the further examination of the fragment was abandoned."

These observations show:—1. That the pulsation of the arteries is a property residing in the coats of those vessels, which is independent of the heart's action, though supplementary to it;

and also independent of the stimulus arising from distension with blood.

2. That a peculiar propulsive force, in all probability, resides in the capillary vessels, of whose nature we are at present uninformed.

3. That one of the chief causes of the capillary circulation, is probably the pulsation of the arterial branches from which they spring.

Calomel in large doses as a Diuretic in Dropsies. By Wm. H. McKee, M. D., of Raleigh, North Carolina.

In the treatment of dropsies, calomel has been considered from its earliest introduction into use, as a valuable adjuvant in combination with other remedies, but in no single instance am I aware that it is mentioned by writers as acting as a diuretic when given alone either in small or large doses. Its use in large doses is no new practice, for it has been given freely in the treatment of fever and cholera, and for its hydragogue, cathartic, sialogogue and deobstruent properties, it is well known. In combination with squills, nitre, and sometimes digitalis, it is a very popular mode of administration, and one that generally fulfils the indication for which it is prescribed; but there are cases in which it fails as well as the rest of the class of diuretics, and the physician is thrown back on his own resources for something more active and reliable. When such is the case, calomel in doses from forty to a hundred grains repeated for two or three nights successively, will certainly fulfil the most sanguine hopes, by not only freely purging, but by producing copious diuresis, and at the same time sedation, followed by sleep such as cannot be had from opium nor its preparations, with safety. During its action, gin or whiskey toddy may be freely used, should there be much prostration; but this is seldom the case, the stimulus only aiding the diuretic action. I have seen persons who were unable to lie down, for a week at a time, longer than a few moments, sleep well after the action of the first dose.

The usual mode of administration is to give fifty grains of calomel for three successive nights, and should it fail to produce the

desired effect, to wait for several days and repeat the calomel in eighty or a hundred grain doses, but in no instance that has come under my observation, have I ever known the fifty grain doses fail; and in but one case have I ever given a hundred grains. This was followed by free and copious purging at first, and in a short time by diuresis. It is not often that the first dose will act as a diuretic, but after the administration of the second its effects will be produced; the third dose I have never known to fail. During its action, it will, in some instances, produce violent emesis, and sometimes act as an emeto-cathartic; but this only facilitates its action, and no serious consequence may be apprehended. While using these doses, vinegar should be freely applied to the mouth and throat, so as to prevent its specific effect, and cold drinks of all kinds prohibited. Calomel given in the above doses is no more liable to produce its constitutional effect, than it is, when given in smaller ones. I have known one grain to produce salivation without accomplishing any good, but evidently harm. When the indication requires it, it should be used freely. As with quinine, we may produce ringing in the ears; and many contend that when this is the case, the specific effect is produced, and all is accomplished that may be expected of it. But this is known to be false. In the treatment of fever it is continued until the fever is subdued, without any detriment to the patient. So it is with the calomel in large doses in the treatment of dropsies. By using the necessary precaution, you can succeed in introducing into the system such quantities as will fulfil the indication, with no more danger than there is in giving smaller ones. When salivation is produced, it is as manageable as under any other form, and yields as promptly to the usual remedies. I do not recommend its use in these doses in all cases of dropsies, for many of them are merely functional, and the sequelæ of some acute disease, and readily yield to milder remedies; but it is in those cases where there may be hepatic and splenic derangement, when the ordinary remedies fail, that calomel may be relied upon, not only for its cathartic properties, but mainly for its diuretic action. So prompt is it in producing this effect, that I have known it to succeed in expelling the fluid where there was organic disease of both the heart and lungs. If the constitution of the patient is very delicate, for instance a female, doses of thirty to forty grains will

be large enough. I was called to see a lady about fifty years of age, who had been pronounced by her medical attendant to be in the last stage of hydrothorax; with cough; bloody expectoration; great dyspnœa; inability to lie down; general anasarca and distension of the abdomen; countenance anxious; tongue red, pointed and dry. She had taken a great variety of remedies, and appeared to be hourly growing worse. I prescribed thirty grains of calomel to be aided by whiskey toddy, and to be repeated the second night. The first dose produced copious purging, the second acted as an emetic with moderate purging, but with profuse diuresis. On visiting her the third day after administering the first dose, she was so much relieved that she was enabled to lie down and sleep with comfort, and to get up and walk without assistance. Her cough and expectoration ceased; tongue became moist, and all difficulty of breathing disappeared. But it is just to remark that the specific effect of the calomel was freely developed, but yielded promptly to the ordinary mode of treatment. After this, she was treated with chalybeates and the preparations of quinine, and recovered her usual health within a few weeks.

The diet in all cases should be very abstemious. After the action of the calomel, it will be necessary to administer some remedies to prevent a re-accumulation of the fluid. I have found a solution of the muriated tincture of iron to answer the indication very well, but in some instances it will disagree with the stomach. When such is the case, the tartrate of iron and potassa suspended in wine—about an ounce to the quart, and a dessert spoonful given three times a day—will suit the most delicate stomachs, as well as fulfil the indication desired. Should the bowels become constipated, and require an aperient or cathartic, cream of tartar and epsom salts equally combined will answer the purpose. But should the re-accumulation of water take place in spite of these means, it will become necessary to repeat the calomel, and follow it by the same treatment. In a number of instances I have found the following combination to answer the purpose when most remedies had disappointed me, especially when the calomel was contra-indicated from constitutional causes. Take one pint of the tincture of asclepias syriaca, which is made by adding one ounce of the fresh root to one pint

of whiskey; let it stand for fourteen days, and then add it to two pints of the strong decoction of sarsaparilla, with one drachm of powdered alum. Of this, give a tablespoonful three or four times a day. Should it not be active enough, or too active, it may be regulated according to the ability of the patient to bear it. It will keep the bowels gently moved two or three times a day, besides acting as a good diuretic and tonic, increasing the appetite and strength.

Too much attention cannot be paid to the manner of dressing as well as the diet. Flannel should always be worn next the skin, and exposure of all kind avoided, especially in damp and rainy weather; for after the fluid has been expelled from the system, the muscular and cellular tissue is so much relaxed, that if these precautions are not attended to, and aided by proper bandaging of the abdomen, the fluid will, as a matter of course, re-accumulate. By adhering to this, the tissues are aided as they gradually assume their natural healthy and tonic action, and are enabled to resist the morbid influence; for, in fact, this is the great difficulty in curing hydropic diseases.

In confirmation of my own experience in the diuretic action of calomel, the following extracts from the published proceedings of the Medical Society of the State of North Carolina, held in May last, will give additional testimony to its efficacy.

A discussion arose as to the *modus operandi* of calomel, on an enquiry made by Dr. J. E. Williamson of Caswell, if calomel was in fact a stimulus, or what was the received opinion as to its action? and he referred to an instance where it had been administered in very large doses by a friend, with decided benefit, in dropsy, acting as a sedative and diuretic at the same time.

Dr. Charles E. Johnson, of Raleigh, "remarked that he had considerable experience in the exhibition of both drugs (calomel and quinine) in large doses, and could testify to their sedative value and influence when given in this manner. Calomel, he believed, in doses of 50, 100, or more grs., particularly in some cases of dropsies, depending upon enlargement of the liver and spleen, and obstruction of the portal circulation, was followed by the happiest results, producing copious and free discharges, sometimes very watery, but not always corresponding in quantity with

the increase of the doses, which was, perhaps, generally true of increasing doses of calomel; and that in many instances, sometimes after the second dose, more generally after the third, when the doses have been given day after day, it acted *powerfully as a diuretic.* He had seen many cases of dropsy of this kind improve rapidly, and speedily recover under this treatment. He had never seen salivation produced in this manner, although the action of the calomel was decidedly *sedative*, inducing quiet and sleep, diminished frequency of the heart's action, and an improved state of the secretions generally, with a moist tongue and skin, and all without much, if any prostration."

I am aware that it is too often the case that a general conclusion is drawn from a mere isolated fact, but such is not the case in the present communication. I could give a number of cases to illustrate the above treatment, but deem it unnecessary, as the general principle is here laid down. The main object in directing the attention of the profession to this subject at all, is, that they may see what is the experience of others, and to show that calomel possesses a property far more reliable than has generally been conceded to it as a diuretic, and surpasses all other remedies of that class in dropsical diseases. Should the experience of others, after having given it a fair trial, accord with my own, I shall feel that my humble labors have not been in vain.

Severe Wound by a Circular Saw. By Wm. J. Henderson, M.D. Lock-Haven, Pennsylvania.

On the seventh of May last, I was called to Farransville, six miles from home, to see G—— S——, who, having fallen asleep in the mill, was caught by a circular saw which inflicted a severe and extensive wound in the back. I found the patient lying on the floor, weltering in blood from the wound, which had been hastily sewed together, until I should arrive. The wound was parallel with the spine, and about one and a half inches from that column. On measuring I found the following dimensions: length 8 inches, 6 wide, and one and a half deep. The contractions of the abdominal muscles caused the wound to gap to such an extent, that I laid both my hands flat

between the edges, which were ragged and contused; the muscles of the spine were torn and came away in shreds. The ninth and tenth ribs were completely divided about an inch from the articulations, together with their accompanying arteries, which bled very little. Portions of the shirt and vest were sticking in the wound, and much clotted blood.

After cleaning the wound of all foreign matters, and clipping off the ragged edges, it was closed with five sutures and adhesive straps; the cold water dressing applied, and the Pulv. Doveri prescribed. Next day the patient said he felt quite well, had slept soundly all night, and had no pain in the wound. He continued rapidly to convalesce without any bad symptoms, and on the sixth day walked down stairs and rode in a wagon four miles; and in two weeks from the injury he paid me a visit in town having walked all the way, perfectly restored; the wound having closed without any secretion of pus, and the divided ribs having firmly united.

Fortunately for the patient, the bench on which the saw ran was lower on one side, and being drawn down on his back, the saw cut *obliquely* towards the spine. Four lines deeper the cavities of the chest and abdomen would have been penetrated.

Hot Springs on the Overland Route to California. By G. S. Walker, Sacramento, California; and of the Jefferson Medical College. Communicated by Professor Dunglison.

Philadelphia, Nov. 23, 1851.

Dr. Dunglison:

Dear Sir,—In accordance with your request I transmit you a short account of the boiling springs I visited during the summer months of 1849, and a description of their singular effects upon those of us who drank of the water.

These springs are situated, as well as I can judge, near the 40th parallel of north latitude, and 40½° of longitude west of Washington city, and are directly upon the California trail leading from the *sink* of Humboldt river to Pyramid Lake—the terminus of Truckie river.

The whole country around seems to be volcanic, and is now a vast desert, utterly and entirely destitute of vegetation, and afford-

ing no fresh water to the traveller for a distance of 75 miles. The springs, I may remark, are not those visited by Colonel Fremont. Our little company of thirteen men reached these springs in the forenoon of a hot July day, weary, hungry and thirsty; having travelled 50 miles without rest, and without water—save a small quantity of a brackish, insipid article, which we had obtained, and carried in our canteens, and which was exhausted long before reaching this place. The springs I did not count, but they may number 200 within a circuit of as many yards. Each spring seems to have perforated the rock, making holes varying in diameter from two or three inches, to the largest which is twenty-five or thirty feet. The rock seems to be a carbonate of lime.

The various springs differ in temperature, some being almost cold, while others are at the temperature of the boiling point.

Some had the nauseous taste of a strong solution of sulphate of magnesia. One or two discharged a blueish-white, thick, mortar-like substance, which I judged from its taste and appearance to be principally a thick solution of carbonate of magnesia. From one of these, and the largest of all, I procured two small bottles-full, for the express purpose of sending the water to you to analyze; but an accident deprived me of them.

Not the least curious feature of these springs is their ebbing and flowing, which take place at irregular intervals. The flowing is preceded by a loud subterranean noise. Some of them overflow for a few minutes, and fall back three or four feet below the surface, while no one of them flows at all times.

The largest, which was at the temperature of 212°, was almost perfectly transparent; so much so that we could distinctly see the bottom, a distance of some twelve or fifteen feet. This we deemed the least unpleasant to the taste, and of the water we made coffee of which we all drank freely. After leaving the springs, which we did in a couple of hours, we directed our course toward Pyramid Lake, a distance of some twenty-five miles. Some of our party were taken sick in an hour after, and every individual within twenty-four hours. Some were first attacked with vomiting, but more generally it commenced with languor and sickness, and an itching of the orifice of the urethra, followed by severe ardor urinæ, pains in the groin, thighs and testicles. In all the cases there was a constant and inordinate desire to void the urine. In many, a

slight hæmorrhage occurred, and in others a discharge of a thick, glairish, pellucid matter from the urethra. Those who were first attacked, suffered the most, but recovered most quickly—the affection only lasting a few hours; while those who escaped until the next day, suffered much longer but not so severely. Plenty of fresh water, and a few doses of Dover's powder combined with a small portion of camphor seemed to afford relief. All recovered within two days; and our sufferings would soon have been forgotten, had it not been for the occasional jests of some of the party about the gonorrhœa we had caught upon the plains. I may add, that all the animals—horses, mules and cattle—that drank tolerably freely of the water, had many of the same symptoms; and some died, doubtless—it seemed to me—from the effect of the water.

Yours, very truly,

G. S. Walker.

Pennsylvania Hospital—*Surgical Wards.—Service of* Drs. Fox and Norris.

Cases discharged since August 15th, 1851.

	Cured.	Relieved.	Died.	Total.
Abscess,	2	0	0	2
Anchylosis of elbow,	0	1	0	1
Burns,	11	2	3	16
Cancer of lip,	2	1	0	3
" tongue,	0	1	0	1
" penis,	1*	0	0	1
Caries of sternum,	0	1	0	1
Concussion,	0	1	0	1
Conjunctivitis,	0	1	0	1
Contusion,	16	2	0	18
Disease of hip,	0	1	0	1
" testicle,	0	1	0	1
" tibia,	0	1	0	1
Dislocations 2, viz:				
Humerus,	1	0	0	1
Femur,	1†	0	0	1
Fistula in ano,	1	1	0	2
Fractures, simple, 40, viz:				
Skull,	0	0	2	2
Inferior maxillary,	1	0	0	1
Clavicle,	3	2	0	5
Humerus,	4	1	0	5

* By amputation.

† Reduced in ten minutes under the influence of ether, after three previous unsuccessful attempts without it, one of which lasted three hours.

	Cured.	Relieved.	Died.	Total.
Condyles of humerus,	3	1	0	4
Forearm, (both bones,)	0	2	0	2
Radius,	3	0	0	3
Ulna,	2	0	0	2
Ribs,	4	0	0	4
Ilium,	1	0	0	1
Femur,	2	1	0	3
Patella,	1	0	0	1
Leg, (both bones,)	6	0	0	6
" ununited,	1	0	0	1
Fractures, compound, 21, viz:				
Skull,	0	0	1	1
Face,	1	0	0	1
Nose,	0	1	0	1
Shoulder,	0	0	1	1
Forearm,	2*	0	0	2
Fingers,	9	0	0	9
Thigh,	0	0	1	1
Leg,	2	0	0	2
Foot,	3	0	0	3
Gonorrhœa,	7	1	0	8
Hemorrhage from urethra,	0	1	0	1
Hydrocele,	1	3	0	4
Inflammation of ear,	0	1	0	1
" knee,	1	0	0	1
" leg,	2	1	0	3
" foot,	1	0	0	1
Injury of wrist,	0	1	0	1
" knee,	1	2	0	3
Iritis	2	1	0	3
Onychia,	6	0	0	6
Ophthalmia,	1	0	0	1
Paronychia,	15	1	0	16
Scalds,	3	0	0	3
Sprains,	3	0	0	3
Syphilis, (primary,)	8	3	0	11
" (secondary,)	5	3	1†	9
" (tertiary,)	1	0	0	1
Tumors,	1	0	0	1
" of eyelid,	0	1	0	1
" of breast,	1	0	0	1
Ulcers, simple,	11	5	0	16
" scrofulous,	0	1	0	1
" varicose,	1	0	0	1
" of breast,	1	0	0	1
Wounds, gunshot,	3	2	2	7
" incised,	5	1	0	6
" lacerated,	6	2	1‡	9
" penetrating,	2	0	0	2
	172	52	12	236

* One by amputation.
† From hemorrhage from nasal artery.
‡ From mania à potu.

Gunshot wounds of Forearm and Thorax.—Recovery.—Noble McClintock, aged 18, was brought to the Hospital on the evening of the 17th of August, having been shot half an hour previous, whilst engaged in a firemen's riot. His countenance was pallid and expressive of great nervous depression. Pulse 70 and feeble. Skin moist.

On examination, there were found two wounds in the right forearm, and one in the right thorax, evidently produced by a small pistol ball, which had passed through the fleshy portion of the supinator longus, one inch below the bend of the elbow, and then entered the right thorax between the seventh and eighth ribs, a little posterior to a vertical line from the nipple. The wound in the thorax was round; lips inverted, blackened, and presented all the appearances of the ball having passed through the parietes of the thorax. There were no bloody sputa, or physical signs of the lung having sustained any injury; the vesicular murmur was equally audible on both sides, and percussion resonant. There was no tenderness of the abdomen, save at the scrobiculus cordis (where it was but slight.) There was no spasm of the diaphragm, nor were there any signs of the ball having passed round the thorax beneath the integuments, and making a wound of exit at an opposite point.

Having drawn the edges of the wounds together by adhesive strips, the cold water dressings were applied. Perfect rest enjoined; ordered absolute diet.

Reaction came on very gradually, but no hemorrhage occurred.

On the third day after the accident, some symptoms of pleuropneumonia of a local character manifested themselves, and were treated by dry cupping, mercury and diaphoretics. They subsided in a short time. Some small pieces of clothing were discharged from the wound, which afterwards gradually cicatrized, and the patient was discharged well on the 16th of September, thirty days after the occurrence of the accident.

He has since been several times to the Hospital and stated that his health continues good. On being questioned as to any previous illness, he stated that some years ago he had had an attack of pleurisy on the right side. Such having been the case, it is not difficult to account for the absence of any symptoms

of collapse of the lung, by the adhesions which such an inflammation usually establishes between the two pleuræ.

The absence of bloody sputa still leaves a doubt as to the ball having entered the lung, but we have more than one case on record, from good authority, of wound of the lung without such symptoms manifesting themselves; and although we are not confident that the ball did enter the lung in this case, we have little doubt but that an autopsy would reveal it encysted somewhere within the parietes of the thorax.

One of the fatal cases of gunshot wound, occurred in an attempted burglary at a farm below the city. The burglar was shot from a second story window, with large buck-shot. Many of them entered the scalp, one or two producing indented fracture of the skull. Others entered the right thorax, wounding the lung. The man was brought to the Hospital about an hour after the accident, but in a dying state. He died two hours after his admission, never having reacted at all; and, on examination, the right pleura was found filled with blood—there was no injury done to the brain.

The other fatal case was the result of an accident which occurred on board of one of the steamers for Boston. When about to leave port, a small cannon was accidentally discharged at the moment when the mate was at its muzzle, attempting to alter its elevation. The whole charge, consisting of powder and wadding, passed obliquely between his thighs, causing a very extensive wound.

The chief part of the scrotum, the right testicle, except a portion of the epididymus, a portion of the left testicle, the integuments and cellular tissue of the perineum, the arms and lower portion of the rectum, and the tissues between the anus and inner side of the right thigh, together with a portion of the upper extremities of the muscles of that thigh, were carried away. The urethra and crura of the penis were laid bare, and the tuberosity of the ischium was exposed, though not denuded of its periosteum.

The hæmorrhage was very profuse, and although a number of vessels were tied immediately on his reaching the Hospital, it was renewed when reaction was established—more vessels were then tied, and the whole surface of the wound sprinkled with

powdered matico. Even with this it was impossible to entirely arrest the oozing, and the patient lost more than a pint of blood in the course of the following night.

The sufferer had been a stout healthy young man, aged 26, and resisted for a long time the depressing influence of such an injury. The sloughs following the wound were deep, and the suppuration profuse but it was not until the 22d day after the accident, that he died from exhaustion.

ADDINELL HEWSON, Resident Surgeon.

Pennsylvania Hospital, Nov. 15th, 1851.

BIBLIOGRAPHICAL NOTICES.

A system of Operative Surgery based upon the Practice of Surgeons in the United States, and comprising a Bibliographical Index and Historical Record of many of their Operations for a period of two hundred years. By HENRY H. SMITH, M. D., &c. &c. *Illustrated by numerous steel plates—Parts 1st and 2nd.* (8vo. pp. 220 and 27 plates.) Philadelphia, 1851: Lippincott, Grambo & Co.

Operative Surgery based on Normal and Pathological Anatomy. By J. F. MALGAIGNE, Professeur Agrégé, &c. *Translated from the French by* FREDERICK BRITTAN, A. B., M. D., M. R. C. S. L. *Illustrated by wood engravings from designs by Dr. Westmacott.* Philadelphia, 1851: Blanchard & Lea.

In the first of the two works above announced, may be realized, to some extent, the fulfilment of a project that has long been entertained in various quarters, but never thought of, we suspect, as an undertaking on the scale in which it finally appears. In the second, many of our readers may discover the familiar features of an old and universal favorite of the European schools, which they will rejoice to find introduced at last among us in an excellent English dress. We wish them all success, and doubt not that they will both attain it, notwithstanding the number of reprints

on similar subjects with which the country has latterly been favored. They are intended respectively to occupy distinct and different places, which have hitherto been vacant in our working libraries; and we trust they will be found to occupy them well enough to justify the enterprise of the gentlemen to whose liberality and care they owe the handsome style in which they are produced.

It would be hard to imagine a title more attractive to the practitioners and students of this country, than the one which Dr. Smith presents. Operative Surgery, so notoriously popular a theme with nearly all who are engaged in medical pursuits, is here offered in a guise, and under a prestige, which are admirably calculated to interest the feelings and meet the actual wants of the whole American profession. The beauty and extent of illustration with which, notwithstanding its convenient size and form and moderate cost, the author and his publishers have managed to enrich their offering, would amply suffice to command attention and place it in the front rank of standard publications; but its character as an essentially American work, built, as its title page imports, upon a strictly national foundation, is the one which must secure for it a general welcome, and for which we are especially glad to invite attention to it. No book has hitherto been written, which, in the language of the preface, "has presented the American practitioner with a comprehensive view of the opinions, operative methods and instruments of those of his countrymen who have given to American Surgery a character of its own." It has been the chief object of our author to fill this void within the smallest practicable compass, by means of condensed letter press descriptions and remarks, and very numerous accurate and beautiful engravings in the highest style of art.

This purpose of the author's appears to have limited somewhat the extent and fulness of his text, without, however, materially diminishing its practical utility. He "has not desired," we are informed, "to go over ground which has so recently been well displayed by writers both in Europe and this country. Many details of history, pathology, physiology, and surgical proceedings which are essential to a complete treatise upon the subject,

have therefore been designedly omitted in this, as not coming within the scope of its plan."

Still in endeavoring to preserve the character of a manual of Cisatlantic operations, and basing his descriptions mainly on the views of his own countrymen, he does not allow himself to lose sight of the necessary Transatlantic aid, but has endeavored to display, in connection with others and his own, the opinion of "such European authorities as are universally received as sound." To these different descriptions he severally appends, in furtherance of his object as a teacher, an appreciation of the methods he describes, or an estimate of their advantages, which he wishes us distinctly to understand as "founded solely upon his own opinion," and therefore not to be confounded with the previous accounts of the various writers quoted.

But we must not regard his volume as a manual of operations only. He has materially increased its value and authority as a standard book of reference, in the curious choronological sketch of the progress of American Surgery, and in the still more interesting and instructive bibliographical index which appears in connexion with the different parts. This bibliographical index is a treasure in itself and a monument of the compiler's industry, which must win for him the gratitude and esteem of every medical inquirer who can appreciate the vast amount of labor which its preparation has required.

In the index are included, first, a general catalogue of native writers and publications on subjects connected with Operative Surgery, from 1783 to 1850 inclusive; secondly, a list of accessible American Journals containing papers on surgical subjects; and lastly, a list of distinct papers, to be found in the periodicals and elsewhere, on the topics of the different portions of the work. We find, for instance, under part 1st, bibliographical directions to sixteen different papers, "On Elementary Operations, &c.," and eight "On Etherization"; and under part 2d, two hundred and seven different papers are pointed out relating to the operations therein discussed.

These chronological and bibliographical records, and the large number of splendidly engraved and colored illustrations drawn from nature and from the best European models, constitute, in connection with its compact and very manageable form, the great

features of the work, to which it will owe much of the favor which probably awaits it.

So much for its design and general character. We propose now briefly to examine into the arrangement of its letter press, and to note a few matters in detail, as they may present themselves in a necessarily rapid glance from page to page of the two parts before us.

The careful surgeon will be glad to learn from the opening paragraphs of his introductien, that our author is not disposed to place an undue value upon the mere manipulations of his art. "Appropriate constitutional measures," says he, "are therefore often as essential to the success of an operation as anatomical knowledge is necessary to its performance; and the happiest results will usually be obtained by those who closely attend not only to the local, but also to the general management of the cases on which they operate. For this reason, a successful surgeon must not only be a judicious practitioner of medicine, but also a devoted nurse and careful observer of the varying conditions of the system, under all circumstances. In every operation he should feel that he is largely indebted to nature; without her aid he can neither anticipate nor obtain success, whilst with it, especially as exhibited in the processes of adhesion or reproduction of tissue, he possesses a power that seems almost divine."

Pathological knowledge and tact, and ability in diagnosis, he rightly deems not less essential to success in operating, than the other qualifications just referred to; and hence he wishes his readers to remember that while, for purposes of methodical arrangement, "the ensuing pages are mainly limited to mechanical details, he nevertheless has no intention of giving them any other value than that of being one of the means of treatment occasionally demanded for the relief of disease."

With this explanation he proposes to divide the general subject into two leading parts: 1st, Minor Operative Surgery, or simply Minor Surgery; and 2d, Major Surgery, or Operative Surgery proper. As, however, he rejects the former of these, having previously made it the subject of a separate work, his object in the present instance, is, in a word, under the latter head, "to show the various modes of operating, and especially such as are resorted to by surgeons in the United States."

In accordance with this intention he arranges his work in five divisions. 1st, General Duties and Elementary Operations. 2nd, Operations on the Head and Face. 3rd, Operations on the Neck and Trunk. 4th, Operations on the Genito-Urinary Organs; and 5th, Operations on the Extremities." He adopts this regional distribution of his topics as that most apt to be suggested by the natural relation of parts. For a similar reason the details of each subject of inquiry are presented in the order in which the operator would be likely to attend to them. In the first place the anatomical relations would be thought of, next the methods of operating, then the instruments required, after these the dressings, and lastly the adjuvants necessary in the general or local subsidiary treatment.

The first Part, as it is entitled on the cover, is occupied with forty six pages of letter press in four chapters, with five plates of illustration. It is devoted to the consideration of 1st, the general duties of an operator; 2nd, Elementary operations; 3rd, means of arresting hemorrhage; and 4th, duties of a surgeon immediately after operating. Under the head of general duties of an operator, he begins with attentions to the patient, including the duties of a surgeon before, during and after an operation; next the care and management of instruments, including their action and selection, preparation and sharpening, manipulation and preservation; and lastly, the operator's duties to his assistants, such as their selection and instruction.

In discussing the duties of the surgeon before operating, he tells us that one of the most important is to save the patient unnecessary pain. This he advises to be effected through the agency of anæsthetics. He entertains no doubt of the safety of "Etherization," and does not hesitate to assert that "except in some few instances," (two of which he cites, by the by, with very little show of reason, so far as we can see, for the exception,) "the creation of pain by any operation can only be regarded at the present time as both unnecessary and injurious." And hence he naturally infers, that "philanthropy and that desire to ameliorate the sufferings of mankind, which is the true basis of sound practice, demand that neither prejudice, nor ignorance of its effects should longer prevent its employment by every operator." "In my hands," observes he again, "pure ether has been widely administered during

the last four years; but for some months past, I have resorted to it mixed with chloroform, in the proportion of one part of the latter to five of the former, and I have yet to see the first patient in whom evil has undoubtedly resulted from its use." We have no time, nor do we feel inclined, to dwell upon the anæsthetic question. We only quote our author in relation to it now, in order to show the decided ground he takes in favor of the practice; and at the same time to express the gratification we feel at finding it so earnestly and frankly recommended in a treatise, which, being avowedly put forward as a sort of mirror of our national operative science, must be looked upon by many at a distance, as at least a fair exponent of the Philadelphia creed. Happily the conclusion, this time at all events, would prove a just one, in spite of the extremely conservative resistance to the prevailing current of opinion and experience, which still exists in certain influential quarters of this city.

Under the caption of duties after the operation, we find among other matters very briefly touched upon, some general hints respecting the kind of diet proper at this period, and especially suggesting the policy of avoiding in many cases a sudden change or excessive reduction in the amount and character of nourishment. His ideas on this matter might have been more clearly given, yet as they contain nothing particularly new, we allude to them only for the purpose of protesting against the impression likely to be conveyed by the language of a portion of the concluding paragraph, as follows: "A routine practice in any complaint," says he, "is always bad." No one will venture to deny this venerable axiom; but with the remainder of the sentence the case is very different. We have it in the following words:—"and in this respect American surgeons have perhaps followed too closely the precepts of their European brethren, forgetful of the different habits of our people, and of the daily developments of science."

He further adds, "meat, and that often in large quantities, is the daily food of all the laboring classes, as well as of many others, in the United States, whilst thin soup, salad, and wine is the diet of most of the same class on the continent. Low diet, therefore, is not so great a change to them as it would be to patients in this country, and the American surgeon may, in many

instances, advantageously pursue a practice more in accordance with his own locality."

Now we are not willing to admit any one of the affirmatives that are thus jumbled up together in the sweeping, but no doubt unintentional reflection on American surgeons and "their European brethren" contained above. We do not believe—indeed the pages of the book itself most honorably contradict it—that American surgeons, (we mean those of mature age and experience, and who have been trained at home,) are "forgetful of the different habits of our people, and of the daily developments of science"; nor is there any reason to suppose them in the habit of following the precepts of any single set of men in a matter of daily observation in which they are quite as well prepared and competent to form their own opinion as the oldest of their brethren, far or near. Lastly, we were not before aware that European operators were addicted to a routine practice, no matter in what class; or at any rate, that their "precepts" were not intended to apply to as great a variety of classes and accidental circumstances as well as operations, as had become familiar to us here. True it is that the young men who go abroad to walk the hospitals, and too readily content themselves with a crude experience that is much oftener the evidence of things not seen than the substance of things hoped for, have few opportunities of watching the treatment or results of operations on any classes similar, physically, morally or in previous habits, to the parties who become the subject of the knife at home. But it is idle to consider the occasional acts and dicta of these junior observers as the expression of the scientific habit of the land. The therapeutic precepts and practice of authoritative surgeons of this country, were long since established on the same broad foundation of general principles which supports the philosophy of surgery throughout the world, whether it deal with the prince, the burgher, or the peasant, the rich or the poor, the employed or unemployed, of whatever kindred, tongue or people. These principles have come down to us *in verba magistri* from both sides of the Atlantic; changeful and changing only through the media by which they may be studied, and in their great outlines so marked and clear that he who runs may read them.

Chapter 2nd is devoted to Elementary Operations, including Incisions, Dissections, and Punctures.

Chapter 3rd treats of the means of arresting Hemorrhage, such as Compressions, Ligatures, Styptics, Cauteries and other usual expedients.

Chapter 4th, under the head of Duties of a Surgeon immediately after Operating, presents us with some account of dressings, of the closing of parts after an operation, and of the means employed to favor union.

In regard to dressings, and the great importance of attention to them, together with the frequent indifference of students to this stage of operations, we find some very just remarks. "The first and subsequent dressings of an operator are the real tests of his surgical skill. In making them, he first proves his claims to the high position of a surgeon, and rises above the grade of the 'cutter.' Before this the surgeon was limited to the mechanical portion of his profession, but in the dressing and after-treatment he has an opportunity of showing his judgment and the resources of his science." It is a matter of regret that while upon a topic considered so important, a few more precise and definite instructions were not given in this place, in addition to the special directions which are reserved for after consideration in the study of each operation. We would be glad to know, for instance, the usual precautions to be taken in the removal and renewal of the first and subsequent dressings just spoken of, and how soon and how often, as a general rule, these dressings ought to be applied. A similar lack of definite information may be observed, we think, in regard to minor points throughout this chapter. Thus in reference to means of retaining parts in apposition, isinglass receives no notice, collodion is barely spoken of, and the only adhesive strip really described, is directed to be about half an inch in width.

The first plate of the illustrations of the work, gives accurate and beautifully finished side views of some of the instruments employed in making incisions and dissections, in the extirpation of tumors and the ligatures of arteries. Plate 2nd, represents various instruments employed for the arrest of hemorrhage, extraction of polypi, &c. Plate 3rd, presents a beautiful series of delineations, modified and drawn from Bernard and Huette, of the six positions of the scalpel. In plate 4th, we have nine figures relating variously to the arrest of hemorrhage by the compression and ligature of arteries. The fifth and last plate of the first part

exhibits in seven capital figures a front view of various incisions, and of the different modes of uniting wounds by sutures or adhesive plasters.

So large an amount of space has been already occupied with the notice of the introductory portion of the work of Dr. Smith, that we will be forced to pass much more hurriedly over what remains. This is the less to be regretted, inasmuch as it would be impossible to do any justice to the specialities and various details of so many and such important processes. All that we can pretend to do, must be to present a rapid sketch of the general order of arrangement, and an enumeration of the different sets of operations figured and described, and to accompany them in passing, with a few notes here and there in connection with certain points of interest.

Part second, then is occupied, as a whole, with operations on the head and face, and opens in the first chapter with the surgical anatomy of the head.

Operations on the head are treated of in chapter 2nd in two sections, the first being on operations on the scalp; and the second, on operations upon the bones of the cranium. They are illustrated in three plates, showing the instruments used upon the bones of the head, certain operations on the scalp and bones of the head, and thirdly, a side view of the structures of the head and of the operation of trepanning. Among operations on the scalp, we have the extirpation of encysted tumors, nævi materni, cephalœmatoma, and division of the supra-orbitar nerve. Then for the operations on the bones of the head, those for caries, necrosis and exostosis of the cranium are briefly sketched, also trephining the cranium, puncturing the head for hydrocephalus, and the removal of fungoid tumors of the dura mater.

Various operative expedients are described for the obliteration or removal of nævi materni or erectile tumors. Of the different methods of removal, Dr. Smith prefers excision, where the skin is not much involved in the disease, or the tumor larger than a walnut; the hemorrhage being in most instances, according to his experience, readily controlled by ligature or by pressure, particularly when care is taken to incise only the healthy structure, and not to open the tumor. In case of larger size of tumor, in which the hemorrhage is more to be apprehended from the ordinary extirpation, he recommends the operation of Dr.

Physick and Dr. Wm. Gibson, by partial incisions renewed at intervals, the vessels being taken up as they are divided, and the edges of the wound being prevented from uniting by the interposition of lint between their opposing surfaces. We doubt the propriety of advocating the excision of these tumors as an easy and safe operation, in preference to the various expedients which are unattended with the loss of blood. The operation with the knife, no matter how performed, is unquestionably a difficult and dangerous one. In the hands of eminently skilful and dexterous surgeons, on more than one occasion, it has proved positively frightful, so much so as to have led some of the first operators of their day to reject it altogether; and it ought not, in a work intended for the guidance of students and junior practitioners, to be proposed, without a special warning of the danger that might possibly ensue from its performance.

Although exostosis of the cranium is alluded to and even represented on a plate, nothing is said of spina ventosa of the skull. Here was a chance of introducing Dr. G. McClellan's case (quoted, with a portrait, by Dr. J. H. B. McClellan in his edition of his father's Surgery, p. 348,) which we regret to find neglected. As a rare and instructive operation by a noted Philadelphia surgeon, it was at least as worthy of special record as that of Dr. Warren for tumors of the dura mater.

Passing over the remaining pages of chapter 2nd, in which appears an excellent account of the operation for trephining, we come to chapter 3rd, containing a brief view of the surgical anatomy of the face; and to chapter 4th, which treats of operations practised on the eye-lids and on the lachrymal apparatus. Among those upon the eye-lids, we find many extremely interesting autoplastic devices for the relief of various deformities, all of which are well described and represented.

Next comes chapter 5th, on operations on the eye-ball, including those upon the external coats and on the muscles of the ball, as well as on the globe itself. This series, of course, introduces the subject of strabismus, the different methods of operating for which are carefully figured and explained.

In regard to the extirpation of the eye-ball, for which the "ordinary operation" is given very cursorily in the same section with strabismus, we note a direction for arresting the hemorrhage "by

stuffing the orbit with lint." This is not in accordance with the principles inculcated in some other portions of the work, and is certainly not according to the best authority. The practice is allowed by continental surgeons, although Malgaigne recommends only small pellets or plugs of lint to stop the bleeding; and Sedillot, while directing the use of charpie to fill the orbit, expressly says, there is nothing to fear from hemorrhage. It is discountenanced, however, by British operators, among whom we may refer to Lawrence and Skey. The former objects to it, for good reasons which he gives in full, and the latter calls it "a highly dangerous proceeding."

After these we meet in chapter 6th with the anatomy of the eye-ball, and of the iris in its peculiar relations, the operations for cataract, and those for the formation of an artificial pupil.

Several matters of interest present themselves in the course of these short sections on ophthalmic operations; particularly in relation to extraction, the removal of strabismus, and the various modes of producing artificial pupil, including the operation of our townsman, Dr. Hays. The limits of our notice, however, oblige us to hurry by all of these, and, indeed, to pass over in the same superficial manner the seven extremely interesting chapters which complete the volume. Chapters X, XI and XII especially are rich in records of the triumphs of American Surgery, and in details which are in the highest degree valuable and attractive; and we would gladly spend an hour, did time allow, in culling from their pages many hints suggested, and curious facts that might be noted in connection with the various admirable autoplastic and resection operations, in which the dexterous ingenuity and sagacious enterprise of our countrymen are seen to make a characteristic impress on the extension of this province of the healing art. We must content ourselves, however, by stating in very few words that the synopsis of operations on the eye is followed by a short account of metoplasty, as exemplified in a case of Dr. Watson's of New York; by a chapter (VIII) on the external nose, including rhinoplasty; by another chapter (IX) on the internal nose; by a full and very interesting succession of chapters (X, XI and XII) on the mouth, externally and internally, along with tongue and throat, embracing among other topics, hare lip, cheiloplasty, genioplasty, and salivary fistula;

on resections of the upper jaw bone and lower jaw-bone, and on staphyloraphy and staphyloplasty. Finally, we have in chapter XIII the concluding sections of the published portions of the work. They are devoted to the demonstration of the operations on the ear. Each of these chapters, it must not be forgotten, is furnished with its section on the appropriate surgical anatomy, and also with its splendid steel engravings. Several of these latter, we observe, are after Bernard and Huette, Bourgery and Jacob, Liston and other British and continental sources; but a considerable number, and some of the very best, are original, or from American authorities, and all may be regarded as unsurpassed in their peculiar style by those of any publication in the Union. We shall look with great pleasure for the concluding portion of the work, which we hope to be able to notice more in detail than has been possible on this occasion; meanwhile the author, publisher and artist will accept our heartfelt thanks, in behalf of all who take any interest in our opinion of the enterprise, for the very handsome manner in which it has been thus far carried out. We sincerely hope their efforts will meet with the prompt and ample recompense which, in these days of reprints and second hand translations, they have a right to claim for the benefit of native letters, if not for the good of their native land. No American practitioner who has this good at heart, should neglect to provide himself with an early copy for his table, not only as an instructor that may often prove a friend in need, but as a noble evidence of better times in prospect for the home teachers of the *lex scripta* of his art.

But little room remains for us to dwell upon the translation of Malgaigne. Indeed, the reputation of the work, whether French or English, is by this time so entirely established, that very few words will enable us to say all that is necessary for the information of our readers. For years past this manual has been the ruling vade mecum of the students of all the European schools, and has been largely read and quoted from in Great Britain and America. We venture to aver that there has not been in Paris for the last ten years a student of surgery from any country, who has not diligently conned and thumbed its well known pages. Yet, strangely enough, it had passed through

four large Parisian editions, one Belgian edition and five translations, before it found its way across the channel, except in its old Parisian shape. And, still more strangely, five years more have been allowed to pass before any one has thought of republishing its English counterpart for the benefit of the American profession.

It must prove an acceptable addition to our stock of aids and comforts of this kind, even in the midst of many other similar productions, because it is beyond comparison the most complete and comprehensive as well as most compact; while for clearness, accuracy and methodical arrangement, it is no less superior to all the manuals extant. We speak of it as a manual of operations only. More than this is not intended by its author. His views of what ought to be required in a full treatise on Operative Surgery are vastly more extended. The limits of his work restricted him nearly altogether to the surgical anatomy and the different operative manipulations. These have, however, been treated with so much special care and with such variety and fulness, as well as precision, of detail and description that his volume may safely be regarded as an indispensable adjunct to the less systematic and comprehensive publications of Liston, Fergusson, Skey, and others, which have been reprinted or otherwise issued in America. We say nothing of the larger historical and illustrated works of Velpeau, Pancoast, Smith and others, since they are manifestly of a different character.

The work is divided into three parts; the first being upon elementary operations, the second on general operations and the third on special operations. These three grand divisions embrace (with the exception of the use of bandages and other dressings, and the management of fractures and luxations, purposely omitted) the whole range of manipulative surgery. His plan in describing an operation is to begin with a concise but lucid sketch of the surgical anatomy of the part concerned; then to proceed with a methodical and minute account of the different stages of the ordinary process, in regular order of succession; next, a history of the various important modifications that may have been adopted or proposed; and lastly, to submit a comparative appreciation of the different methods just described, together with a view of their probable effects.

Mr. Brittan is entitled to our thanks, not only for the fidelity and elegance of style with which he has discharged his obligations as translator, but for the numerous additions which he has appended in the form of foot notes, relating chiefly to British operations or improvements of later date than the authors' last edition. The value of the book is still more decidedly increased by the handsome and well selected illustrations from the drawings of Dr. Westmacott. These wood cuts and the English notes have rendered the American reprint actually more desirable than the original work; and nothing is wanting but a chapter on the present modes of blunting the sense of pain—on anæsthetic inhalations, in other words—to make it all that need be looked for as a model of its class.

Outlines of Chemistry for the use of Students. By WILLIAM GREGORY, M. D., Professor of Chemistry in the University of Edinburgh. *First American from the Second London Edition, Revised, corrected and enlarged.* By J. MILTON SANDERS, M. D., LL. D., Professor of Chemistry, Pharmacy and Toxicology, in the E. Medical Institute of Cincinnati, &c. Cincinnati, H. W. Darby & Co., 1851. pp. 614.

This work of Dr. Gregory sustains his reputation as a teacher of Chemistry, and confirms the favorable opinions, formed from his previous labors in the same department of science and in conjunction with Professor Liebig. The selection and discussion of the facts and theories, evince judgment and discrimination in their adaptation to the wants of the student, and this arrangement is in general conformity with the plans adopted by some of the British Chemists, following in this respect more especially, in the inorganic part, the work of Turner. One alteration from this general plan, the entire omission of the class of imponderables, is striking, and based on correct principles, and no doubt was adopted with due attention to the requirements of those students for whom the work was intended. We cannot, however, consider it as adapted to the present position of students in the United States. These subjects are in many parts of essential importance, especially to the medical student; and although it is very desirable that he

should be thoroughly grounded therein, previous to commencing his medical studies, yet, in the great majority, we find an almost total want of this knowledge, the continuance of which deficiency would be a material obstacle to his future progress in chemical knowledge. The space which has been obtained by this omission, has been usefully devoted to the extension of the organic division of the work. It would have been desirable that a work emanating from a chemist of such high reputation as Dr. Gregory, should have been written with great clearness and perspicuity, especially as intended for those to whom the subjects are, if not entirely new, certainly not familiar. Students generally consider chemistry as a difficult branch of science, and hence require the instruction to be conveyed in such form, that the ideas may be received without any revision of the language used.

We regret that we cannot speak in the same favorable terms of the revisions and corrections of the American edition. More reflection should have been bestowed on some of the few foot notes which have been appended to the original work, for we cannot attribute to any other cause, the singular assertion on page 75, that lime owes its greater degree of solubility in cold water, to the greater quantity of carbonic acid in cold than in hot water. At page 474, a claim is laid for the discovery by Professor King of "resinoids" in several indigenous plants, as phodophyllum, cimicifuga, &c., thus conflicting with similar claims made by W. S. Merrill, A. M., in July 1850. Whatever priority either of these gentlemen have, as to some of those substances mentioned, neither can lay even the shadow of a claim to the very first on on the list. Students have been made aware, through the pages of a work in all their hands, (United States Dispensatory,) of the existence in the root of May-apple of an active bitter principle, called podophyllin, the discovery of which dates as far back as 1832, as reference to the Journal of the College of Pharmacy, Vol. III., p. 273 will show; and in addition, the same Journal for 1847, (vol. xix. p. 165,) contains a detailed analysis, in which the activity of the drug as a drastic cathartic is traced to two resins, one of which was obtained pure and colorless.

The American Edition, it is stated, "is more perfect than the London one; numerous errors, which had escaped the author, being corrected." It is to be regretted that this has not been

carried to a greater extent, those remaining being sufficiently numerous. It is only necessary to cite a few. The formulæ for the three compounds of phosphorus and hydrogen, as given on pages 132 and 134, differ, and three out of the six are incorrect. P. 177, magnesia "is best obtained pure by heating the carbon to redness," meaning carbonate. Sweet oil of wine is $2S_2O + AeO + C_4H_4$" the 3 in the sulphuric acid being transposed &c. We should have supposed that the isolation by Frankland, of compounds, having an identity of composition with ethyle and amyle deserved a passing notice, from their relation to the theory of compound radicals, even if the Editor did not confide in the results. Another point of practical importance struck us in relation to an assertion at p. 188, in connection with the hydrated sesquioxide of iron. "In its moist state it is the only known antidote to arsenious acid." The efficacy of magnesia, in the same cases, has now so much testimony in its favor, that the above unqualified assertion is decidedly objectionable, and however true at the time of original publication in 1847, requires correction by means of the knowledge subsequently obtained.

In typographical execution, paper, &c., the work can fairly compete with its congeners of the Eastern States.

THE MEDICAL EXAMINER.

PHILADELPHIA, DECEMBER, 1851.

NEW ORLEANS MONTHLY MEDICAL REGISTER.

We have the *second* number of this new candidate for professional support—the *first* number having doubtless failed to reach us through the delinquency of the post-office. It is a small but spirited sheet, of the '*Gazette*' order, and presents in the number before us, an interesting series of original and selected papers. The editor, A. Forster Axson, M. D., has our best wishes for his success.

DEATH OF DR. J. M. WALLACE, OF PHILADELPHIA.

The announcement of the death of this gentleman, we doubt not, will reach his distant friends with the same stunning force that it did those in his own city, whom his brief and sudden illness but little prepared for so sad a termination of his most useful life. He was attacked with a severe pleuro-pneumonia on Friday, Nov. 6th., which resisted all treatment, and ended in rapid effusion, under which he sank on Monday, Nov. 10th, at 4½ P. M., in the 37th year of his age.

There was perhaps no man in the profession more universally beloved than Dr. Wallace. Young and old, rich and poor, united in the same expression of unmingled regret at his untimely fate. His manliness of character, his modest self-reliance, and his promptitude and decision of action, had secured to him the confidence of men far beyond him in age and professional standing; while his more intimate friends and associates ever found in him a sincerity and truthfulness of disposition and soundness of judgment, that could always be relied upon. He occupied a place in their affections that can never be filled.

The character of his mind was essentially practical, and always fertile in expedients, a trait whose value every surgeon will recognize. As a teacher he was clear and explicit, possessing a remarkable facility in imparting knowledge and impressing it upon his hearers. The high position which he held in all his relations both public and private, will be better estimated by the following resolutions passed by the College of Physicians and by his private class, than by any feeble expression of ours.

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At a special meeting of the College of Physicians of Philadelphia, held Nov. 12th, 1851, the following preamble and resolutions were unanimously adopted:

Whereas, by the sudden decease of Dr. Joshua M. Wallace, we have been called upon to mourn the loss of one of our most esteemed and promising colleagues, we feel it due to ourselves, to the memory of the deceased, and to the profession of which he gave so fair a promise of becoming one of the brightest ornaments, had not his career of usefulness been so unexpectedly cut short, to give an expression to our sentiments in reference to this melancholy event. Therefore,

Resolved, That in the death of Dr. Joshua M. Wallace, we mourn the loss of a colleague endeared to us by the dignity of his moral deportment, the suavity of his manners, and by his professional attainments and skill.

Resolved, That we most sincerely condole with the family and relations

of the deceased, and tender to them our warmest sympathies in their severe bereavement.

Resolved, That Dr. Francis G. Smith be requested to prepare a biographical notice of the deceased, to be read before the College.

Resolved, That Drs. John Neill, Francis West, and John B. Biddle, be constituted a committee to present, on behalf of the College, a copy of the foregoing preamble and resolutions to the family of the deceased.

D. FRANCIS CONDIE, Sec'y.

At a meeting of the private class of the late Joshua M. Wallace, M. D., assembled to express their regret and sorrow for the death of that distinguished and useful gentleman, distinguished both in the capacity of a private citizen, and in that of the profession to which he belonged and which he so much adorned, the following gentlemen were appointed a committee to draft resolutions expressive of their feelings on the occasion:

Charles Neff, Chairman; L. H. Smith, Secretary; E. O. Dummer, M. G. Lofland, James F. Mabrey, A. B. Longman, W. R. Cunningham.

The following report was presented and unanimously adopted:

1st. *Resolved*, That whereas, by the inscrutable decree of Providence, a useful and honorable member of society, as well as of the profession to which we aspire, has been cut down in the midst of his career, and in the prime of life, that we, his private class, though associated with him for but a comparatively short time, had yet sufficiently learned to estimate his qualities, both of mind and heart, as not only to admire, but love him.

2d. *Resolved*, That we feel deeply the loss of one whose instructions we had but just sufficiently experienced to learn their value, and by the aid of which we had indulged the hope that we should be able to accomplish the arduous task before us.

3d. *Resolved*, That with his bereaved family and relations, as well as the numerous friends which one so gifted most deservedly had, we most deeply and truly condole and sympathise.

4th. *Resolved*, That we wear the usual badge of mourning for thirty days after the adoption of these resolutions.

5th. *Resolved*, That a copy of these resolutions be sent to the widow of the late J. M. Wallace, M. D., and to his brother, Ellerslie Wallace, M. D., our much esteemed Demonstrator of Anatomy and private instructor.

6th. *Resolved*, That the foregoing be published in the *Medical News* and *Medical Examiner* of this city.

Philadelphia, Nov. 13th, 1851.

We have also to record the death of another much respected practitioner of Philadelphia, STEPHEN HARRIS, M. D., which took place after a protracted illness. Dr. Harris was a younger brother of Dr. Thomas Harris of the United States Navy, and also of Dr. William Harris of this city. He had passed most of his life in Chester county, in this State, where he was long engaged in an extensive practice. Within two years past he removed to Philadelphia, and had the best prospects of professional success here, when stricken down by disease. He enjoyed in a high degree the regard and esteem of all those who knew him.

DRS. GRANVILLE SHARPE PATTISON, J. KEARNEY ROGERS, and J. R. MANLY, distinguished and well-known physicians of New York, have been summoned hence, within the past month—we believe, quite unexpectedly. Dr. Pattison's death, was, we learn, the result of ulceration of the ductus communis choledochus. Dr. Rodgers also fell a victim to biliary disease—inflammation of the vena portarum. Dr. Manly was advanced in years. Many of our readers may remember him as a delegate to the meeting of the National Medical Association in Philadelphia, where his enthusiastic and able support of the cause of *medical reform* was quite conspicuous.

DIED, on the 13th of November, 1851, Doctor FREDERICK CROWLEY, aged 38 years.

At a special meeting of the Northern Medical Association of Philadelphia, of which Dr. Crowley was a member, the following resolution was unanimously adopted.

Resolved, That while we deeply deplore the loss of one of our associates, cut off from among us in the prime of his manhood, and in the enjoyment of the active duties of his profession, we feel that the profession at large, of which he was a highly respected member, has sustained a loss in one whose medical attainments and whose social and moral worth were appreciated wherever he was known.

Dr. JOHN BASKIN, an eminent practitioner of Mercer county, in this State, died at his residence there, on the 26th of September last, from the effects of injuries received in being thrown from his carriage the preceding day.

The subjoined "slip" from the Charleston Medical Journal and Review, for November last, has been forwarded to us by Dr. F. M. Robertson, of Charleston. We give it place—though certainly a considerable draft upon our space—from a wish to allow a full hearing to all the parties concerned in this controversy. We forbear all further comment on the subject, and with this publication we dismiss it from our columns, which are inappropriate to the discussion of any "collateral issues" developed in the controversy.

[The subjoined "Card," being considered by Dr. F. M. Robertson as a final settlement of the difficulty between Dr. H. A. Ramsay and himself, we insert it, together with his letter to Dr. DeSaussure, at his request. —*Eds. Charleston Medical Journal.*]

A CARD.—Since the publication of my reply to the pamphet recently issued by Dr. F. M. Robertson, of Charleston, S. C., I have been in correspondence with Dr. J. J. Robertson, of Washington, Ga., through a friend, and having received from him the grounds upon which the opinion of himself and Dr. D. M. Andrews, in regard to my professional statistics, was based—which opinion led them when called on by members of the American Medical Association, at their late Convention in Charleston, to express a want of confidence in the reliability of my obstetrical statistics, and induced Dr. F. M. Robertson, a member of that Association, to move to strike out the notice of said statistics from the report of Dr. Storer, of Boston—and having received from Drs. Andrews and Robertson the assurance that those opinions were neither formed or expressed through personal ill-will towards myself, but were honestly entertained and given in pursuance of what they regarded their duty to the profession; and feeling convinced from the representations of these gentlemen that they were influenced by circumstances, which, unexplained, were calculated to impair their confidence in me as reporter, I feel bound in justice to them, to state that, with such such impressions on their minds, they could not, when called on, have given other that an unfavorable opinion, and that Dr. F. M. Robertson, in making the motion he did, under the circumstances, was actuated by no unworthy or improper motive.

The grounds on which Drs. Andrews and J. J. Robertson were led to the statement that I had not, during my practice of physic, been continuous in one place, were my removal from Bookersville to Mrs. Wellborn's, a distance of six miles, and subsequently to this place, a distance of one and a half miles, while I regarded myself as never having left the *neighborhood* in which I originally settled. I have also been satisfied, from the statements and evidence furnished me by Dr. J. J. Robertson, that although he has not had a general practice in my neighborhood, he has made over twenty professional visits in the vicinity of my location within the past six years, a fact of which I had not been apprised at the time my late pamphlet was published.

In issuing this card to the profession and the public, I am impelled

by no other motive than a desire to render strict justice to all the parties concerned, and therefore feel bound, under the circumstances, as an honorable man, to withdraw all offensive language I may have used in my pamphlet, or elsewhere, touching this controversy, either towards Drs. Robertson and Andrews, or towards Dr. F. M. Robertson, of Charleston.

I respectfully submit this statement to the profession and the public, with the single additional remark, that it is regarded by all the parties as an amicable and honorable termination of this entire controversy.

Raysville, Ga., Oct. 14th, 1851 H. A. RAMSAY.

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CHARLESTON, S. C., Oct. 31st, 1851.

Dear Doctor:—Since you handed me the two letters of Dr. H. A. Ramsay to yourself—one dated Sept. 1st, the other Oct. 1st, I have received "a card"—issued by the same gentleman—dated Raysville, Ga., Oct. 14th, 1851, one of which I presume has been sent to you also.

As circumstances growing out of Dr. Ramsay's published defence of August last, and his private correspondence with numerous persons, have drawn me into personal issues with certain parties, which are yet unadjusted, I deem it but just to Dr. Ramsay, as well as due to my own position, to make the following remarks, which will prevent misunderstanding in future.

1st. The card alluded to, was unsolicited by me, but voluntarily tendered by Dr. Ramsay. Nor was the disclaimer, of its author, of imputing "*unworthy or improper motives*" to me, for the course which I thought it my duty to pursue in relation to his obstetrical statistics; or the withdrawal of "*all offensive language in his pamphlet or elsewhere,*" in regard to myself, the result of any correspondence or explanation on my part, either *directly* or *indirectly*.

2. Desiring still, as stated in my note to you, of the 28th of June, published in my circular of July last, to "throw no impediment in the way of his doing himself ample justice in the matter complained of," I now accept the card as an honorable amend for the imputations against my motives, and his personal abuse, and consider it, so far as I am concerned, a final termination of the personal difficulty between Dr. Ramsay and myself.

3d. In as much as the collateral issues in which I have been involved, (by no act of my own however,) with the editors of certain medical periodicals, in relation to the merits of the "Obstetrical Statistics," are yet unsettled, I hold myself perfectly free, until they are satisfactorily arranged—in case it becomes necessary to my defence—to discuss the professional merits of the points of difference, without its being considered a violation of my acceptance of Dr. Ramsay's card.

4th. If the question should be introduced into the American Medical Association, at its next meeting, as has been intimated from certain quarters, I reserve to myself the privilege claimed in the preceding paragraph.

Having thus set forth my position, that it may be clearly understood by all parties, I remain very truly and sincerely,

Your obedient servant,

Dr. H. W. DeSaussure, F. M. ROBERTSON.
Sect. A. M. A., Charleston, S. C.

MEDICAL NEWS.

ORGANIZATION OF THE KENTUCKY STATE MEDICAL SOCIETY.—The physicians of Kentucky met at Frankfort, in that State, in Convention, on the first of October last, and adopted a constitution for the formation of a State Medical Society. The first annual meeting of the State Medical Society of Kentucky was subsequently held, and the following gentlemen were elected officers for the ensuing year: *President*, Dr. W. L. SUTTON, of Georgetown; *Vice Presidents*, Drs. W. S. CHIPLEY, of Lexington, and J. Dudley, of Nicholasville; *Recording Secretary*, Dr. W. C. SNEED, of Frankfort; *Corresponding Secretary*, Dr. R. J. BRECKINRIDGE, Jr., of Louisville; *Treasurer*, Dr. R. W. GLASS, of Shelbyville; *Librarian*, Dr. B. MONROE, of Frankfort. Various standing committees were appointed, and the city of Louisville was fixed upon for the holding of the next annual meeting of the Society, on the third Wednesday in October, 1852.

Delegates to the National Medical Convention from Chester county, Penna., to meet at Richmond in May next: Doctors A. H. Gaston, W. Worthington, J. B. Brinton, W. D. Hartman and S. Harvey.

APPOINTMENT.—Dr. Pereira has been appointed Physician to the London Hospital, in the room of Dr. Frampton.

THE QUARANTINE CONGRESS AT PARIS.—It is to be hoped that the labors of the eminent men whom some of the European States have sent to Paris, to frame laws and regulations regarding Quarantine, in keeping with the scientific views of the present age, will have a satisfactory result. The congress has been assembled for the last two months, and is composed as follows: Austria, Dr. Meni, chief physician of the province of Dalmatia, author of several esteemed works; Tuscany, Dr. Betti, Professor of Surgery at Florence, and for a long time at the head of the sanitary affairs of the country; Naples, Dr. Carbonaro; England, Dr. Sutherland, whose knowledge of sanitary matters we need not dwell upon; Genoa, Dr. Bô; Greece, Dr. Costi.

PROFESSOR GORINI.—This gentleman, who is professor of natural history at the University of Lodi, made lately in London, before a circle of private friends, a very remarkable experiment illustrative of his theory as to the formation of mountains. He melts some substances, known only to himself, in a vessel, and allows the liquid to cool. At first it presents an even surface, but a portion continues to ooze up from beneath, and gradually elevations are formed, until at length ranges and chains of hills are formed, exactly corresponding in shape with those which are found on the earth. Even to the stratification the resemblance is complete, and M. Gorini can produce, on a small scale, the phenomena of volcanoes and earthquakes. He contends, therefore, that the inequalities on the face of the globe are the result of certain materials, first reduced, by the application of heat, to a liquid state, and then allowed gradually to consolidate. In another and more practically useful field of research, the learned professor has developed some very important facts. He has succeeded, to a most surprising extent, in preserving animal matter from decay, without resorting to any known process for that purpose. Specimens are shown by him of portions of the human body which, without any alteration in their natural appearance, have been exposed to the action of the atmosphere for six or seven years; and he states that, at a trifling cost, he can keep meat for any length of time, in such a way that it can be eaten quite fresh. The importance of such a discovery, if on a practical investigation it is found to answer, will be more readily understood when it is remembered that the flocks of sheep in Australia are boiled down into tallow, their flesh being otherwise almost valueless, and that in South America vast herds of cattle are annually slaughtered for the sake of their hides alone.—*Lond. Med. Times.*

OBITUARY.—Dr. Roe, Deputy Inspector General of Hospitals, Madras, who died there on the 4th of Sept., from the effects of an accident, entered the medical branch of the army in 1808. He served in the battle of Corunna, and in the expedition to Walcheren in 1809. From 1811 to 1814, he served in the Peninsular war, and had received the silver war medal with ten clasps, for his active services on the following occasions: at Corunna, Albuhera, the seiges of Ciudad Rodrigo and Badajos, the battles of Salamanca, Vittoria, Pyrenees, Nivelle, Orthes, and Toulouse.

M. de SAVIGNY, Member of the Academy of Sciences of Paris, has just died at Versailles, at an advanced age. M. de Savigny had acquired much celebrity by his scientific labors during the campaign of Egypt, and by his investigations on the anatomy of insects, crustaceæ, &c.

RECORD OF MEDICAL SCIENCE.

PATHOLOGY AND PRACTICE OF MEDICINE.

On the Treatment of Obstructions of the Bowels. By EDWARD WELLS, M. D., Oxon.—In some preliminary remarks, the author informs us that it is not his object to treat of intestinal obstructions from causes external to the tube, as tumors, &c., nor of obstruction arising from internal causes, as hardened fæces, neither of those cases which originate in hernia. The cases which he has in view are those which have no demonstrable cause of the obstruction, such as in the following supposed case: You are called to a patient, who informs you that he has had no proper relief from the bowels for the last seven or eight days, that he has been to the druggist, and taken black dose upon black dose, pill upon pill, and that they are all in him, and he wants to know what he is to do next. He tells you further that it is true he has been to stool once or twice, or perhaps oftener during the time, that he has perhaps on each occasion passed something, but he is sure it is not what he ought to have passed. In short, to use his own expression, although he has occasionally had a scanty evacuation, he is convinced that "*nothing has gone through him.*" Upon examining the abdomen, you find some distension around the umbilicus, with a degree of tenderness on pressure. This last symptom varies from that slight shade in which the patient can hardly say whether the pressure relieves his pain or not, up to decided tenderness at the least touch. In mild cases the patient will tell you he feels very well, excepting the obstruction, but the knowledge of its existence makes him very uncomfortable. In other cases there is some degree of sickness conjoined, merely perhaps occasioned by the purgative draughts. In severe cases the sickness is more permanent, mucus or bile being rejected from the stomach. In such instances we should expect the tenderness on pressure over the bowels to be greater, though still not in any degree approaching to what occurs in peritonitis. There will also be a rumbling of flatus in the intestines, and the patient will say he feels the wind pass downwards to a certain point and then stop. All this time the pulse is not perhaps accelerated, it is generally weak; the tongue is moist and often clean; the urine, provided the obstruction is not situated high up in the bowels, is not necessarily affected, though generally high colored.

Under these circumstances, and especially in the milder cases, the first thing perhaps that you do is to order a large enema to be thrown up. It is found to traverse the large intestine easily; the patient assures you that he feels it go as far as the ilio-cœcal valve, and after a short time it returns without any tinge of fœcal matter. The obstruction is not in any part of the colon, but somewhere in the small intestine.

What treatment should then be adopted? In the severe cases, where there is pain upon pressure, distension of a portion of the intestine, a rumbling of flatus, and frequent vomiting, it will be said that the line of

treatment is easily chalked out; that, whatever the cause of the obstruction, we have inflammation superadded; and that our treatment must be directed to subdue the latter. This is quite tru ; and in such well-marked cases I did not think there would be much chance of the case being misunderstood. But we must remember that these severe instances of the disease are only the consequences of a continuation and aggravation of the symptoms of its milder forms. We must not forget that the most simple case of obstruction is liable to run on into a fatal form, if, with a view of obtaining an action of the bowels, we are incautious in the prolonged use of irritating medicines. Finding that the patient's chief discomfort arises from the fact of the bowels not acting, that he professes himself as feeling otherwise well, we are, perhaps, rather too liable to fall in with his own fancies, and just give him one more dose.

Now, in these cases what ought we to do? In the first place, abstain entirely from all purgative medicines. It will be much better to err in not giving sufficient aperients, than to err in giving too much. The first thing to do is to compose the patient's mind by informing him that there is no hurry for the bowels to act; that if he waits patiently, they will be sure to act in time; to tell him instances of persons who have gone a long time without any action of the bowels, and have done well.

Next, in these cases of obstinate obstruction I have great faith in the lancet, where it can with safety be used. It has seemed that a slight degree of faintness produced by bloodletting has acted very beneficially in removing the exciting causes of the obstruction, probably by the general relaxation which the faintness itself occasions. By putting the patient in an upright position and bleeding him until he begins to feel slightly faint, I think we are quite safe not to do him any harm. If he is of a weak, nervous temperament, a very few ounces will produce the desired effect. If he be strong, he will afford to lose more. Where, however, the debility of the patient forbids the use of the lancet, it will be as well to apply leeches around the umbilicus. These act, probably, by relieving the local congestion, which is either the cause or the effect of the obstruction.

These measures premised, the safest plan is, I think, to put the patient upon repeated doses of calomel and opium. Even if inflammation be totally absent, the exhibition of these two drugs is likely to be attended with the best effects. The opium soothes the bowels already irritated by the repeated cathartics: it allays the over-excited peristaltic action; it relaxes any contingent spasm, and quiets the patient's mind. To effect these objects, it must be administered in sufficient doses—such as gr. ½ to gr. j. every four hours. The calomel, by improving the secretions, and exciting the action of the liver, tends to remove the cause of the obstruction. And if this happen to depend upon a partial enteritis, the combined action of these two medicines would hold out the best hopes of a successful treatment. If the calomel be sufficiently guarded by opium, there is not, I think, any fear of its producing any serious irritation of the bowels.

While using these remedies I should be in no hurry to accelerate the action of the bowels by aperients. I should rather wait until they begin to act of themselves, as they generally will; and then, provided no inflammatory symptoms were present, there would be no objection to administer a dose of castor oil to aid their propulsive efforts. In these cases it is also better to delay the administration of aperient enemata until the bowels are acting themselves. Previously to this they appear to add rather to the patient's discomfort, probably by the distension they occasion in the large intestine, which re-acts upon the parts already distended by the obstruction.

When there is no tendency to sickness, it is better to allow the patient to take food, in the shape of gruel, by the mouth. It prevents that sense of sinking which he often experiences, and it probably acts in some degree mechanically in propelling the contents of the intestinal tube.

In those severe cases, where there is frequent sickness, with pain in the bowels, and a rumbling of flatus, the above measures will be still further indicated. But there will also be other things which it will then be necessary to atttend to. In these cases it is of great importance to abstain from giving any food by the inouth for some days. A teaspoonful of cold water should be put into the mouth from time to time to allay the patient's thirst. His support should be entirely entrusted to beef tea injections. It is proved that these are sufficient to maintain the strength for some time—at any rate, for a period sufficient to allay the irritating symptoms, which forbid the exhibition of food by the mouth. This part of the treatment I am inclined to consider of the highest importance; for as long as food is continued to be administered by the mouth, and is rejected by vomiting, there will be little chance of arresting the inversion of the peristaltic action of the intestinal tube. The nutritive enemata should be of small bulk, not exceeding at the outside a quarter of a pint; otherwise, they will not only be retained, but they will add to the patient's sufferings. They should be administered at regular intervals of four hours. When there is much rumbling of the intestines, or when there is a difficulty as to the retention of the injections, it is advisable to add to them a certain proportion of laudanum.—*Lon. Med. Gaz.*

Lemon-Juice in Acute Rheumatism. Dr. BABINGTON of Guy's Hospital, London, reports in the London Lancet, 8th November, 1851, several cases of acute rheumatism, treated with lemon-juice, in which "he found it answer the most sanguine expectations." "The lemon-juice which Dr. Babington employed was procured from a wholesale confectioner, the price being no more than sixpence per pint, when retailed in small quantity, and considerably less when furnished by the gallon. When Dr. Babington commenced making trials of the lemon-juice, he prescribed it according to the recommendation of Dr. Owen Rees, in doses of from one to two ounces, three times a day, for an adult. More recently however, he had ordered not less than three ounces, and much more—usually six ounces—taken at a draught, and without any admixture, three times a day. It might be supposed that the patient would find some

difficulty in drinking so large a quantity of such a sour liquid, but this is rarely the case; nor does it in general produce tormina, nor otherwise disagree with the alimentary canal. Instead of relaxing the bowels, as might have been expected, it renders them somewhat costive, so that it not unfrequently becomes necessary to exhibit an aperient. The juice produces no very decided effect upon the kidneys, merely tending by its quantity to promote their secretion. It increases cutaneous action, but to what extent it is difficult to determine, because in rheumatism, a disease in which this remedy is chiefly useful, the complaint itself is marked by the occurrence of profuse perspiration. The only unequivocal effect which uniformly takes place is a diminution in the number and power of the pulse, and of the heart's action. Whether it alters the character of the blood, or whether it affects the heart by diminishing nervous influence, Dr. Babington has not had an opportunity of determining."—*London Lancet.*

Case of Lead Palsy, resulting from the use of Soda-Water, contaminated with Lead. Dr. D. MACGIBBON, of the Charity Hospital, N. O., reports in the N. O. Medical and Surgical Journal, for November, 1851, a very well marked case of lead colic, followed by severe paralysis, which was attended with *blueness of the gums*—the pathognomonic sign of the presence of lead in the system—and was clearly traceable to lead taken in soda-water. "The patient kept a small store in Camp, near Julia street, in which, since the warm season commenced, she kept soda water for sale. The fountain had leaden tube attachments to it for drawing off the fluid; and on an average only one fountain of soda water was used in a week on the premises, thus leaving its contents a sufficiently long time for the free acid to act on the leaden pipe, and also for a portion of the carbonate of lead thus formed, to be diffused throughout it. She was usually in the habit, when she arose in the morning, of drawing off a glass of this beverage and drinking it; the first portion which escaped she always threw away, having heard somewhere that this was not proper to be drank. She also throughout the day would usually drink two or three more glasses of this, which was about the amount she consumed according to her own account."

Dr. M. states that "lead has, in many instances, lately been detected by the most conclusive chemical tests, in the soda water sold in N. Orleans, and that too, where less favorable circumstances prevailed than above," and he has no doubt of the saturnine origin of the case described.

MATERIA MEDICA AND THERAPEUTICS.

Medical Properties and Uses of the Cimicifuga Racemosa. By E. M. BRUNDIGE, M. D.—As an article of the Materia Medica, this plant is of comparatively recent introduction, and its medical properties seem hitherto to have been imperfectly investigated. Mild tonic virtues have been ascribed to it as well as the property of exciting the secretions of the skin,

kidneys, and bronchial tubes. Emetic and cathartic operations are likewise said to have been produced by it, but I have never observed these effects; perhaps, because my doses have been too small, or the preparation chiefly used has been the alcoholic, and not the proof spirit tincture. Alcohol takes up from this root very little coloring matter, and perhaps it rejects something upon which its emetic properties depend. But of its narcotic principle it is a perfect solvent. The therapeutical effects that have been ascribed to this, in my opinion, would receive a ready solution on the supposition that it acts only as a narcotic. That it possesses this property to a considerable degree, can scarcely be doubted. It is a stimulant narcotic, in over doses producing vertigo even to falling, from which the patient soon recovers. When any tendency to cerebral plethora exists, it is one of the worst remedies that can be used, never failing to increase headache and vertigo. In the diseases depending upon innervation, it is one of the best remedies. It is a very prompt and efficient remedy in many cases of atonic and irritable dyspepsia, in doses of grs. x of the powder three times daily. If it has proved decidedly useful in pulmonary cases, as has been asserted, it has probably been when the lung affection depended on irritation in the digestive organs. Its curative effects in subacute and chronic rheumatism are unquestionable. In the treatment of this complaint, as well as in neuralgia, it is often advantageous to combine with it as much colchicum as may be required to keep up sufficient action of the bowels. The tincture of hyoscyamus has been added with happy effect in cases of rheumatism, attended by unusual pain and irritation. A liberal application of the tincture to the surface, both in rheumatism and neuralgia, has been found very useful. Internally, the powder should be administered in grs. xx doses, three or four times a day. The quantity may be increased if necessary. In chorea, I have not seen it tried, but should expect it to exert a controlling influence. Parturient properties have been ascribed to it, and not without cause. As a means of increasing uterine action, it is far less energetic than ergot, but often a better remedy, since the energy with which ergot acts is frequently an objection to its use. In cases requiring but moderate aid, a teaspoonful of the tincture, given for two or three successive half hours, will, in a short time, excite steady and efficient action, which usually lasts till delivery. As a means of detecting false labor pains, it is very valuable, as it soon arrests them, restoring to the patient comfortable and healthy feelings. The frequent vomiting often so annoying in parturition is immediately relieved by it, while the uterine action is increased.

The foregoing are, I believe, about all the purposes for which this article has been used, and are of themselves of sufficient importance to establish its character as a remedial agent. I am now about to present it in a new and far more interesting light, and to state facts to show that, in the treatment of one disease at least, it posesses most extraordinary powers.

I have been accustomed to see this remedy applied to the inflammatory diseases of the eye of the horse, as well as to inflammations in other parts, from early youth, with the most complete success, the inflammation

subsiding in from twenty-four to forty-eight hours. In these cases, the decoction was used, the parts being kept constantly wet with it. Dr. Close, of Portchester, with whom I studied, first applied it to the human eye, and to him I am indebted for valuable statistics.

Ophthalmia, in its various stages and degrees, but especially in its recent and acute form, is the disease over which the cimicifuga has been found to exert an influence so decisive and so prompt, as to establish for it a claim of superiority over every other mode of treatment. By the application of two or three drachms of the tincture to the region of the eye, the disease has been overcome in twenty-four hours. Cures just as prompt and complete have often been made, not rarely and in a few equivocal cases, but constantly, as often as the disease has occurred; and in its most aggravated forms. This has been done unaided by any other means, not even by a purgative, but solely by the application of this simple and apparently trivial remedy. To secure a result so desirable, a saturated alcoholic tincture of the dried root is indispensable. A weaker tincture will not succeed unless the quantity is considerably increased, and then the stimulus of the alcohol in sensitive persons is sometimes so great as to increase the disease, and thus prevent a cure. The proper quantity to be applied, when the inflammation is confined to one eye, is a drachm, and twice the quantity when both eyes are affected. It should be applied slowly and cautiously with a pencil brush, the eyelids being closed so as to prevent, as far as possible, the liquid penetrating between them. Should this occasionally happen, the temporary smarting will not be followed by any unfavorable effect. The brush, when first charged, should be applied to the edge of the hair, at the greatest distance from the eye, passed entirely around it, approaching nearer as the fluid becomes exhausted, and finishing over the eyelids. This course should be repeated until the liquid is all applied, suspending the process now and then to afford the skin time to dry. The application should never be hurried, nor the surface to which it is applied too limited, but should comprise the forehead, temples, superior maxillary region, sides of the nose and eyelids. Its application to so extended a surface is necessary, that all the nerves around the eye may be brought under its influence, and through their action on the blood-vessels, the circulation of the inflamed organ be restored to its normal state. In recent and not very severe cases, one application is sufficient, but in more aggravated cases, it should be repeated after a lapse of two or three hours, and occasionally may be required the second day. In chronic cases the application must be repeated for several successive days, although cases of five weeks' standing have yielded to a single application. In very old and especially chronic cases, the power of the remedy has been greatly enhanced by being used in conjunction with the ointment of iodide of potassium, the tincture being applied first, and the ointment immediately after. In cases attended with unusual pain and irritability, the addition of sulph. morph. grs. iv. or v. to the ℥j of the tincture will be found very useful. When the skin about the eyelids is very red and sensitive, with a tendency to excoriation, so that from the stimulus of the alcohol the application can scarcely be borne, dissolving

tannin grs. vii. to xii. in the tincture will immediately obviate the difficulty. The class of cases in which this remedy shows the most marked effect, is that in which the disease is of an acute form attended by great pain and intolerance of light. The first case to which this treatment was applied, was that of a little boy, who was lying in a darkened room with his eyes firmly closed, and unable to open them. On a forcible inspection, the sclerotic coat was seen gleaming through a flood of tears of a fiery red color. Extreme reluctance to submit so young a child to the usual treatment, induced the practitioner to try the tincture of cimicifuga, having previously witnessed its curative influences in some other forms of local inflammation. It was accordingly applied in the manner above described, and repeated in the afternoon. On calling the following morning, the mother of the little boy was leading him about the yard, his eye entirely cured. Results as striking as this have followed every case when a proper application has been made. I have never yet failed in a single case. Dr. Close, in a practice of five years, gives only one case in which the disease resisted its influence, and that yielded to the remedy after the usual depletory treatment, and in the village where he resides numerous cases occur.

In the purulent form of ophthalmia, but one opportunity has occurred in which I have applied it. Four cases occurred in a family, contracted from a colored girl who came among them, partially cured, from Bellevue Hospital. Three of these yielded, in about a week, to the daily application of the tincture. The fourth was very obstinate, confining the patient to a dark room for three or four weeks, but gave way at last to blisters to the back of the neck, and quinine internally. During the whole of this period the pain and suffering were greatly relieved by the external application of the tincture, applied at any time when the pain became more aggravated.

Should any of my medical brethren be induced to try this mode of treatment, I must insist upon the observation of the precautions above pointed out, both as to the strength of the tincture and the mode of applying it, and I would especially caution them against leaving the application to the patient or his friend. A properly prepared tincture must be used, the root having been gathered within six months.

A case of neuralgia successfully treated by cimicifuga, will close my observations on the use of this article. A young lady had been suffering for more than two years with this disease in the third branch of the fifth pair, for which, early in the disease, a sound molar tooth had been extracted, because the pain always concentrated there. The pain continued to return in daily paroxysms. The usual treatment was resorted to with but slight relief. The last article used was the tincture of the cimicifuga, in doses of a drachm, three or four times a day internally, the same being applied externally, about the same number of times. In three weeks the pain had entirely ceased. Thirteen months afterwards, it returned on the opposite side of the face, and was effectually removed in a few days by the same treatment, no return of the disease having occurred for the last three years.—*N. Y. Medical Gazette.*

SURGERY.

Nitrate of Silver in Leucorrhea.—Dr. N. B. Anderson, of Louisville, Ky., strongly recommends the application of the solid nitrate of silver to the cervix uteri, and adjacent parts—by means of the speculum—as the true remedy for leucorrhea. Dr. Anderson urges, with much force, the necessity of resorting to the speculum, as the only means of correct diagnosis or treatment, in leucorrhea. He has found that the disease is, almost invariably, connected with an ulcerated condition of the neck of the uterus, and he believes that astringent injections are very *ineffacious* in reaching the seat of the disease, which requires the application of solid caustic. He gives the following account of his experience and practice.

"In the course of the last year I have had an opportunity of treating forty-one cases of leucorrhea, and the results have been so satisfactory that I feel justified in submitting my experience to the profession. I am sure that no physician, after trying the improved method, will ever be satisfied to return to the old practice of tonics and astringent injections. Not that tonics are not useful in their proper place. I have found them highly beneficial in many cases, but they are to be looked upon as adjuvants to the main remedy—the nitrate of silver locally applied. So long as the morbid condition giving rise to the unhealthy secretion continues, constitutional remedies are of no avail. The cause must first be removed, and at a knowledge of this, as has already been remarked, we must arrive by means of the speculum.

"In nine cases out of ten which have come under my treatment, I have found no difficulty in obtaining the consent of the patient to the use of the speculum: the woman is then placed in a horizontal position on a lounge or bed, the hips elevated higher than the head; a loose sheet is thrown over her person, in which is an aperture sufficient to admit the speculum; (that which I use is glass;) it is well lubricated, and then insinuated as far as possible into the vagina, following the axis of the pelvis;—the os uteri readily descends into the mouth of the instrument, inclining backwards and downwards, which, by depressing the handle, will remain in the centre of the instrument. In this position, before a window, or with the use of a candle, the organ can viewed to its full extent, and the ulcerated surface found. In nearly every case it presents the same appearance. The neck is found flabby, swollen, and of a pale red and bluish cast—the anterior and posterior lips being much elongated, with the greater portion of the neck ulcerated to some extent. In about one-half of the cases, the ulceration is within, as well as without the neck, and extends some distance into the cavity of the uterus; whilst in the remaining half, it is limited to an area of one-third of the neck, and anterior and posterior lips, the cavity not partaking of the ulceration. In every case, the ulcerated surface is to some extent the same, with but little sensibility about the parts; no pain is ever felt on applying the caustic freely, both around the neck and within the uterine cavity, for the mouth is always open sufficiently to admit of its introduction.

"In the first place, the parts are cleansed with a soft sponge attached to a whale-bone handle, in mop shape, after which the nitrate of silver, in the solid form, is applied very freely to every part diseased. This operation is repeated according to indications, from three to seven days apart, and during the interval, cold water injections several times a day are to be used conjointly with tonics. In some cases I have used the speculum as often as ten times, but in the great majority of cases, it is not necessary to resort to it often.

"Those cases in which the ulceration was seated within the neck and cavity of the uterus occurred in weakly females, who had borne a great number of children, and some with the aid of forceps. In unmarried ladies, it was always seated on the external parts of the neck, and the anterior lip. In the cases in which the cavity was implicated, the free use of the silver was not found to have interfered in the least with the catamenia.

"In almost every case where a female does not bear children, I have found fluor albus to be present;—unquestionably this disease is a frequent cause of sterility; the ulceration of the neck and cavity interfering with the intromission of the semen, which passes away with the profuse discharge."—*Abridged from Western Jour. Med. and Surgery.*

A fluid recommended as a Preservative from Syphilis.—M. LANGLEBERT lately stated to the Academy of Medicine of Paris, that he had discovered a compound which, judging from the success of his experiments, would effectually preserve from syphilis. The following is the formula: Alcohol, one ounce and two and a half drachms; soft soap with stripes and prepared with potash, the same quantity; dissolve and strain, then add essential oil of lemon, five drachms. M. Langlebert mentioned the following experiment:—

He took purulent matter from a chancre with a hard base, and inoculated the left thigh of one of his pupils, who had volunteered his services. On the other thigh the inoculation was performed in a different manner: the lancet dipped in the same pus was made to scrape the skin and make it *raw*, so as fully to ensure absorption; after five or six minutes the preservative fluid was applied on this right side, and this was repeated three or four times. The usual effect was the next day perceived on the left thigh, but the right, where the prophylactic fluid had been applied, presented only a thin and dry crust. On the third day, the pustule on the left thigh was cauterized with strong nitric acid. A public experiment has since been made upon two other pupils, who had requested the *favor*, as well as upon M. Langlebert himself, and the success was complete. M. Ricord is to report upon this new prophylactic.—*London Lancet.*

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ORIGINAL COMMUNICATIONS.

ON ACCLIMATION. *An Inaugural Essay presented for the Degree of Doctor of Medicine in the University of Pennsylvania.* By PHILIP C. WILLIAMS, M. D., of Winchester, Virginia.

Acclimation—the result of the various modifications in the human system, when it is subjected to the influence of a climate different from that to which it has been accustomed—is a theme of deep interest.

It is one, the proper appreciation of which would prevent or greatly mitigate many of the diseases to which man is now subjected, in his migrations for the sake of travel, commerce, and the pursuit of science. The question assumes still greater importance when viewed in its relation to colonization, or the settlement of large bodies of men in regions where the climate is often so different from that of their own native land. Within the limits of the United States alone, the changes thus effected by the continual movement of the people, from the old to the new States and territories, invest the problem with a peculiar and home interest.

It seems to be an established law of nature, that the constitution of man must be modified by the atmospheric influences with which he is surrounded, and that it must carry the impress of the climate which he inhabits.

While we admit the difficulty of accounting for all the distinctive traits that characterize the chief races of mankind, we cannot deny that many of the modifications in their external appearance, and physiological actions, are attributable to the influence of climate. Did the narrow limits of an inaugural essay permit, I might, to substantiate this view, repeat the affirmative opinions of Hippocrates, Montesquieu, and Cabanis. The "Father of Medicine" was the first to point out the controlling influence of climate, as he did so clearly in his essay on "Waters, Airs, and Places," when he compared the people of Europe with those of Asia, and attributed the superiority of the former over the latter, to a purer and cooler atmosphere. Montesquieu appeals to history to show that, in the various struggles among rival candidates for imperial sway at Rome, he who secured the assistance of the European legions was sure of success. General history, in its narratives of the overthrow of empires, kingdoms, and nations, points to the same conclusion.

There are many circumstances which combine to produce these modifications of climate, and these changes in the human system; such as the thermometric and hygrometric states of the atmosphere; the elevation above the level of the sea; the prevalence of, and the exposure to, particular winds, &c.

Let us, for a moment, examine the first of these, viz., the effects of temperature. The range of temperature compatible with human existence is exceedingly extensive; for we find man inhabiting not only the hot burning plains of the tropics, but the frozen dreary and desolate regions of the poles. The experiments of Tillet, Fordyce, Delaroche, Blagden, Berger, &c., show that for a short time, man is capable of enduring a temperature far surpassing that ever reached at the hottest part of the earth's surface. In these experiments air heated even to 325° Fahr. was breathed, for some minutes, without any great inconvenience. The immediate effects were, a considerable increase in the rapidity of the pulse, and excessive perspiration, accompanied by considerable fatigue.

On the other hand, man can live for months (as they, for example, who have passed a winter in the polar regions,) in an air so cold as to freeze mercury.

It has been clearly shown that the effects of heat are manifested both upon the organic and the animal functions. On the former,

they are seen in the increased activity of the circulatory and respiratory functions; on the latter, they are followed by sensations of languor and fatigue.

The *functional* effects of heat are most distinctly marked upon the skin and the liver. The skin becomes changed in its appearance; and assumes either a dark or a yellow tinge, which may be attributed to an increase of the biliary secretion. The liver is stimulated to greater activity; the secretion of bile is greatly augmented, and its sensible properties are considerably changed. This high degree of functional excitement is frequently attended with inflammation of the organ.

The close relation observed between the skin and the liver, both in its physiological and pathological conditions, have induced some authors to speak of a "cutaneo-hepatic sympathy." (*Johnson on Tropical Climates.*) But while the skin and liver are thus *excited* by high and long continued atmospheric heat, the *lungs and kidneys act with diminished energy.*

Cold, in its primary effects, is in direct contrast with heat. The first is as decidedly sedative as the last is stimulating. Cold, continued for a length of time, diminishes the activity of all the functions, and reduces the being exposed to its influence, to a state resembling the sleep of hybernating animals. If continued still longer, it produces a state much resembling intoxication, followed by an excessive and overwhelming drowsiness, which is frequently the prelude to a sleep that terminates in death.

Equally contrasted are the *secondary* effects of heat and cold, if neither be carried so far as to derange the functions. Thus, while the excitement of heat is followed by languor and debility, the temporary depression from cold is succeeded by reaction, and a feeling of increased vigor. Cold, then, when moderate in degree, favors the activity both of the organic and animal functions—especially respiration, circulation, and nutrition—and it is followed by an increased development of animal heat.

This is not the place, nor have I time to dwell upon calorification. It is sufficient to make the statement, which is satisfactorily sustained by facts, that it can be referred to the action of no single organ, but is the result of a chemico-vital action, going on in every part of the system, by the combination of oxygen, taken in through the lungs, with the different tissues of the economy. It

may be looked upon as the combustion of all the solid and fluid elements of the body. Hence every thing, such as good nutrition, regular respiration and circulation, that tends to increase the fuel, increases to a correspondent degree the development of animal heat. In speaking of cold as contributing to the development of animal heat, it is important to remember that it operates in an indirect manner, viz., 1st. By condensing the atmosphere, and thus furnishing for respiration a larger proportion of oxygen in a given time. 2d. By exciting to exercise, in order to resist the depressing influence of cold—thus increasing the circulation and respiration. 3d. By increasing the appetite for nutritive food—especially fatty matters—thus affording a larger amount of "heat generating material."

The *direct* operation of cold is to diminish the animal heat; and if continued in a great degree for a length of time, it may arrest its development by inducing a *torpor of the nervous system*, and thus enfeeble both the respiration and the circulation. The *direct* operation of heat, on the other hand, is not only to excite the functions generally, but also to *increase* the animal heat.

In estimating the influence of temperature upon the human frame, we should study its *comparative effects*, for we find the same climate producing totally different impressions upon its inhabitants, according to their race and prior climatic habits.

This is most strikingly exhibited in the following example from Andral, (*Dict. de Méd. et de Chir. pratique, art. Acclimatement.*) He states that the middle and higher portions of the island of Ceylon are inhabited by Europeans and negroes: the former, being exposed to a climate much hotter than that to which they were accustomed, die, in great numbers, of dysentery or hepatitis; while the latter, subjected to more cold than in their native climate, are rapidly carried off by pneumonia or phthisis.

Another element going to make up the complex problem of climate, is the *hygrometric* state of the atmosphere. This causes modifications in the human system, evinced by a striking difference in the external appearance, muscular development, activity, &c., of the inhabitants of a dry and hot, compared with those of a moist and sultry climate. For instance, the inhabitants of the sandy plains and deserts of Arabia and Africa, are thin and spare, but active: while those of the lower and moister countries as

about the Nile, Niger, &c., exhibit large and gross frames, with a development of adipose and cellular tissue. These differences did not escape the attention of Hippocrates. In the valuable treatise already referred to, he describes the inhabitants of the Phasis, whose country is fenny, warm, humid, and wooded, and where copious and excessive rains occur at all seasons. "They drink the hot and stagnant waters both when rendered putrid by the sun and when swollen by the rains. The Phasis is the most stagnant of all rivers, and runs the smoothest; all the fruits which spring there are unwholesome, of feeble and imperfect growth, owing to the redundance of water, and on this account they do not ripen, for much vapor from the waters overspreads the country. For these reasons the Phasians have shapes different from those of all other men; for they are large in stature, and of a very gross habit of body, so that not a joint or vein is visible; in color they are sallow, as if affected with jaundice." They are naturally languid in supporting bodily fatigue. (Vol. 1, p. 209, Adams' edition for the Sydenham Society.)

Climate is also greatly modified by the *elevation* of a country above the level of the sea. The differences thus produced are very striking. In Mexico, for example, we have every variety of climate. Commencing with the low lands about Vera Cruz, which give origin to tropical fruits and tropical diseases, we gradually rise from district to district, with its diminished temperature, till we reach the city of Mexico, around which we find the temperature and productions of northern Europe. So with the regions of the Andes: travelling from the countries at their base, immediately under the Equator, we have variations from the scorching heat of a tropical sun, to the perpetual snows of Polar regions.

In all these elevated situations the atmospheric pressure is of course lessened. Hence we find that they give rise to an acceleration of the circulation, a tendency to pulmonary congestions, dyspnœa, and even to hemorrhages, in persons accustomed to inhabit situations nearer the level of the sea. In addition to the rarefaction of the air, these places are subjected to great and sudden changes of temperature, to excessively cold and violent winds, to the accumulation of dense fogs, &c.; and thus they exert upon the human frame many of the deleterious effects of Polar regions.

For a full, beautiful and satisfactory exposition of these effects, see "Traité d' Hygiéne Publique et Privée, par Michel Lévy." Tome 1, p. 367–380.

We next approach to a consideration of those climatic changes effected by the exposure of a country to particular winds. This also claimed the observation and attention of Hippocrates.

In the case of the Phasis, already alluded to, he particularly ascribes many of the peculiarities of its climate to the long continued effects of warm, southern winds. So, also, in a subsequent part of the same treatise, (p. 220,) when describing the different people of Europe, he says, "Such as inhabit a country which is mountainous, rugged and elevated, are naturally of an enterprising, warlike disposition, and have no litttle of the savage and ferocious in their nature." On the other hand he remarks, "Such as dwell in places which are low-lying, abounding in meadows, and ill ventilated, and who have a larger proportion of hot, than of cold winds, and who make use of warm waters—these are not likely to be of large stature, nor well proportioned, but of a broad make, fleshy," &c. "Courage and laborious enterprise are not naturally in them." With the region last described, is contrasted that inhabited by the Scythians, which Hippocrates (p. 213) tells us, "lies under the northern bears; and consists of plains, high-lying and naked, and not crowned by mountains." "The winds blowing from the hot regions of the earth do not reach them, or but seldom, and with little force; but the winds from the *north* always blow, congealed as they are, by the snow, the ice and much water."

The same description equally applies to the Tartars, &c., of Northern Asia, who inhabit a country which descends from the Himalayah mountains to the North Sea. How striking the contrast between the inhabitants of this region and those upon the southern declivity, running down to the Indian ocean, and of course exposed to the warm winds of the south.

Differences of nearly equal importance are observed between countries continually exposed to eastern, and those exposed to western winds.

The nature of the soil, the qualities of the water drunk by the inhabitants, and the extent of wooded lands, are also features not to be overlooked in our estimate of climate.

It must be quite clear, even from this necessarily brief and imperfect sketch, that mere temperature, or the degree of heat or of cold, can convey but a very inadequate idea of the character of the seasons and climate of a country. Nor, in estimating even the temperature of any region, can we trust alone to its latitude, or its distance from the equator; for the enquiries of Humboldt and others, clearly show, that the "Isothermal lines" do not correspond with those of latitude, nor are they parallel to each other. Nor are the "Isotheral lines," or those of equal summer, parallel to the "Isocheimal lines," or those of equal winter; nor either of these with the "Isothermal lines." A forcible illustration of this fact is presented in the close resemblance of the winter climate of parts of Devon and Cornwall, in England, to that of central Italy, although they are separated by several degrees of latitude, and differ so much in their summers.

[As a still more striking exemplification of this truth, I would ask attention to the following extract from a speech delivered by Mr. Benton, in the United States Senate. Speaking of the climate of New Mexico, he says, "Humboldt thus describes it: 'New Mexico, though placed under the same latitude with Syria and Central Persia, has a climate eminently cold. It freezes there in the middle of the month of May, near to Santa Fee, and a little further north (under the parellel of the Morea,) the Rio del Norte is covered, sometimes several years in succession, with ice so thick that horses and carriages pass on it.' *Essay on New Spain*, vol. i. p. 103.

'The environs of El Paso are a delicious country, which resemble the most beautiful parts of Andalusia. The fields are cultivated in corn and wheat. The vineyards produce excellent wines. The gardens contain in abundance all the fruit trees of Europe.' (Vol. iii. p. 306.)

"Humboldt," continues Benton, "is right, and recent travellers now confirm what he wrote in 1804. It was at the head of the valley of the Del Norte, some three degrees north of Santa Fee, that Col. Fremont suffered his great disaster—had to struggle through snows above the heads of men and horses, and found it a relief to tread the river, solid with ice, for a road. At Santa Fee, the 20th of February, it was winter; eight days afterwards, on the

Rio Abajo, half way to El Paso, and having descended 2600 feet, and still 1200 feet above the level of El Paso, it was spring, the farmers plowing and seeding, the early fruit trees in bloom, and the air so mild that he camped out at nights without tents, though in a settled and hospitable country."]

Having noticed some of the peculiarities of different climates, and having shown that they modify more or less the constitutions of all who come within the sphere of their continued action, the question naturally arises: can man, with his constitution thus moulded by his native climate, remove to a foreign country without risk of injury to his health, or of suffering from disease? We answer, without hesitation, in the negative.

The history of European colonization and conquest, especially in the East and West Indies, and in Northern and Central Africa, exhibits a frightful loss of life, owing to the changes of climate and the difficulty of acclimation. Even in our own country, we have seen with what a great sacrifice of life have been accomplished, first the settlement of our Atlantic, and afterwards that of our Southern and Western States.

Yearly, the natives of the Northern States, who in the pursuit of commerce, or of pleasure, make a sojourn in the Carolinas or in Louisiana, pay the penalty of disease, and too frequently of life itself.

A knowledge of these and similar facts, must make us slow to credit, at least to the extent generally entertained, the opinion that man possesses the power of adapting himself to *all changes* of climate. A recent writer, M. Boudin, in an article entitled "Etudes dé Pathologie Comparative,"* formally protests against such an opinion, "a belief of which, he thinks, not resting upon any experimental basis, could only have originated from what has been observed of a fraction of humanity represented by what we call the Caucasian race." "From the earliest times to our own day, we see the European fail in all his attempts at acquiring a permanent hold upon the land of Egypt; where, also, the Negro and the Mameluke are shown to be incapable of procreating beyond the third generation. In Corsica, the Italian termination of family names proves, of itself, the inability of the French to establish their stock upon that island. Where, in the north of Africa, do we find the descendants of the Romans and the Vandals? Why, in America,

* Ann. d' Hyg. and de Med. Leg., 1849.

continues Boudin, after passing the 36th degree of latitude, do we meet with slavery everywhere, unless where the elevation of the land mitigates the deleterious influence of an excessively increased temperature? The height above the ocean which gives protection to the life of a European, in hot climates, becomes fatal to the negro. Out of 53 black soldiers posted at Ninera Elia, in the island of Ceylon, at 6200 feet above the level of the sea, 15 died before the end of the year. In the earliest times, despotism made use of exile into countries alien to their nature, for the destruction of different nations. With this view, after the destruction of Jerusalem, were a great number of Jews sent to Sardinia, on the occasion of whose exile Tacitus makes the following reflection: 'Et si ob gravitatem cœli interissent, vile dammum.' After the war of the Morea, Mehemet Ali, wishing to get clear of the undisciplined Arnouts, sent them to the shores of the Red Sea, *where in a few years*, 1800 *men were reduced to* 400, *by the mere influence of the climate.*" A forgetfulness or an ignorance of the incompatibility of certain races with particular regions of the earth, has caused an immense loss of life and the failure of the most costly expeditions. "Thus, in 1817, a negro regiment, placed in garrison at Gibraltar, was almost entirely destroyed by pulmonary consumption. In 1841, the expedition to the Niger failed, perhaps owing to the bad selection of the crews of the vessels. In *three weeks* after having entered the Niger, 130 *out of* 145 *white men were attacked with fever, and* 40 *sank under it.* Out of 158 *negro sailors*, on the other hand, born in America, in the West Indies, or on the coast of Africa, 11 *only* were assailed by fever—but 9 of the cases were fatal. Thiers, in his history of "the Consulate and the Empire," shows the dreadful loss of life among the French troops employed in the invasion of St. Domingo. "But 7000 or 8000 men remained out of an army of 32000; 15000 *were carried off in two months.* At the same time, in which Toussaint l'Ouverture, the sinister prophet who had foretold and longed for these disasters, died of cold in France, a prisoner at the fort of Joux, our soldiers sank under the piercing rays of a destroying sun." It would be easy to multiply examples to the same effect; all going to show the heavy tax paid by those who adventure into remote lands, and into climates differing from that of their nativity. Not only are immense numbers carried off by dis-

ease, but the survivors are reduced below their former standard of bodily strength and mental vigor, and thus are made an easy prey to disease; and in some places it has been doubted whether the engrafted stock could last many generations. Twining asserts (Johnson op. cit.) that, in the delta of the Ganges, such is the influence of its climate, the unmixed European race becomes extinct at the third generation.

Notwithstanding, however, all these instances, we are forced to admit that the human constitution undoubtedly possesses the power of accommodating itself to new, and oftentimes to the most opposite, climatic influences; and this not merely in the case of a few individuals, but of entire communities, and even of great nations. A notable example is afforded in the case of the Jews who are scattered over the habitable globe—all of them retaining features which mark their common origin. But still, if we compare a Dutch with a Spanish Jew, and these again with a Jew of Malabar, we observe a striking difference in their appearance; and also find them exhibiting the shades of complexion, the color of the skin, and the general external development, indicative of the climatic influences to which they are respectively subjected, and which approximate them to the natives of these different countries. We see clearly, that though the race is unmistakeably continued, it has undergone changes, only to be attributed to the influence of a new and foreign climate.

It now remains for us to enquire into the changes by which the process of acclimation is accomplished. First we shall speak of those effected by a removal from a cold to a hot climate, or in other words, SOUTHERN ACCLIMATION.

We have seen that, *in a cold climate*, man's circulation and respiration must be active; that his nutrition must be good, in order to supply the materials for the development of heat sufficient to protect him from the injurious influence of the cold atmosphere by which he is surrounded. In this condition, he is carried to a tropical climate, where the active evolution of heat is not only unnecessary, but injurious; he arrives with all his organs actively discharging their respective functions; developing a quantity of heat far exceeding the demand. Were it not for the abundant perspiration that accompanies this functional excitement, the new-comer would be exposed to the most imminent danger.

It is owing to this fact that, as experience shows, the acclimation of delicate, weak, or old persons, is more easily accomplished than in the case of those possessing strong, energetic constitutions, and with a tendency to plethora.

The stranger, in a *hot climate*, is subject to the following changes: His circulation becomes accelerated; he suffers extremely from excessive heat; is subject to the most distressing restlessness, in his being for a time utterly unable to procure sleep; and he exhibits a strong tendency to local congestions, particularly to the intestinal canal, brain, liver and skin. All strangers, however, are not thus affected; nor can we give any fixed, invariable description that will be applicable to all. We see some affected with a trival indisposition, which soon disappears, and they are well. Some, after continuing for a few days slightly indisposed, are attacked by an affection of brain, liver or intestinal canal, by which they are frequently carried off: others, without any previous warning, are suddenly seized with a fatal inflammation of these organs. The greater number, however, at first, seem to be but slightly affected by the change of climate; but, by degrees, their bodies are emaciated, their strength declines, languor and debility are depicted upon their countenances, and they, unconsciously, becomes victims of chronic diseases of the liver and intestinal canal.

From what has been before stated, we are prepared to learn that countries in the same latitude, do not exert the same influence upon strangers. We find that these countries, owing to peculiar situation, temperature, and many other circumstances, give origin to different diseases, and thus operate in a different degree upon new comers.

It would carry me too far from the immediate subject of this essay, and occupy too much time, to enter fully into this subject; hence I must content myself by making the general statement, that countries of the same latitude, however different may be their endemic diseases, and however different their primary effects, produce ultimately about the same mortality. Though many examples might be quoted, the following from Andral (op. cit.) affords a good illustration of this point. " Out of *one thousand British* troops sent to Jamaica, it was found that *four to five hundred of them perished during the first eight months;* while out of an

equal number sent to Madras during *the same period, only sixty to seventy died.* But this disproportion diminished as their sojourn continued, so that at the end of two years the *number of deaths, in the two stations, was nearly equal.*" In the former case, they were carried off by yellow fever, or some similar disease, which rarely occurs more than once to the same individual; and as the climate is mild, they that escape this attack, afterwards enjoy good health; whereas, in the latter place, near Madras, they are exempt from yellow fever and other such epidemics, so that few die at first, but after remaining awhile, exposed to the climate, with its atmospheric extremes, their constitutions become enfeebled and broken down, and they are carried off in great numbers by dysentery, or some disease of the stomach or liver.

(To be continued.)

Nitrate of Silver in Epidemic Dysentery. By Lew. Slusser, M. D., of Canal Fulton, Ohio.

That diseases of an epidemic character are more difficult to manage—more intractable in their nature and treatment, than the same in a spasmodic form, is a principle in the practice of medicine that will not, I presume, be denied.

During the summer of 1849, dysentery prevailed in this section with unwonted virulence. In some neighborhoods the mortality attending its prevalence was so alarming, that with some practitioners it was regarded as but another form of Asiatic cholera.

In very many cases, the ordinary remedies, such as we had been accustomed to prescribe in former years, and with satisfactory results, utterly failed. Neither mercurials, opiates, nor astringents, separately, or in varied combination, exercised any control over the symptoms, not even palliating them. The same may be said of ipecac., Hope's mixture and counter-irritation. Nor had injections of starch and laudanum, ice water, or suppositories of solid opium any effect in mitigating the tormina and tenesmus. Dr. Young's buttermilk treatment, (vide Amer. Jour. of Med. Sci., 1842,) proved advantageous in a few cases; in others, it undoubtedly aggravated the symptoms. Antiphlogistics were contra-indicated. Some cases, despite the most energetic treatment, would terminate fatally in less than forty-eight hours; others, prostrated from the

excessive evacuations, fell into a typhoid condition, lingered a fortnight or more, and then died. In this latter condition it was, after having failed with those remedies hitherto regarded as orthodox, that I had recourse to nitrate of silver, a remedy first suggested I believe, in this disease, by M. Trousseau. In determining upon this article, I was mainly influenced by the knowledge of its frequent exhibition in other enteric affections, both acute and chronic; and particularly by the ocular proof of its beneficial effects in typhoid fever, which prevailed among us the previous spring. Regarding the pathological conditions of the two affections, as in many respects analogous, I felt justified in giving the remedy a trial. The results were very satisfactory; and I may add, that subsequent experience confirms the favorable opinion previously entertained.

I have not had any experience of its effects in the *first* stage of dysentery. In what some authors, very properly, as I conceive, designate the *second* stage—where the discharges give evidence of an ulcerated condition of the bowels, accompanied with typhoid symptoms—I regard nitrate of silver as *the* remedy to be preferred to any I have yet seen recommended. I will give particulars of a few cases from notes taken at the time.

The first case in which I exhibited it, was that of Mrs T——, æt. about 35; the mother of four children. I had treated her in the spring for "sore mouth peculiar to nursing women." In June she had an attack of cholera morbus, which yielded upon the exhibition of our ordinary remedies. About the first of August, dysentery made its appearance in her family. First her husband was attacked; he convalesced in a few days upon the calomel and opium treatment. Next herself.

Resorting to the previously tried remedies already mentioned, without any mitigation of symptoms, her condition soon became such, that I was satisfied unless some other course of treatment was speedily adopted, the result could not be otherwise than fatal. At this stage decided typhoid symptoms had supervened; countenance, hippocratic; skin, bedewed with a cold clammy sweat; eyes, sunken and lustreless; pulse, weak and frequent; tongue, dry, red and glazed; thirst, ardent; bowels, tympanitic; tormina and tenesmus almost incessant; fifteen and twenty discharges in as many hours, of a purulent, bloody, and lymphous character.

I determined upon the following prescription:

℞.	Argent. Nitrat. Crys.	gr. vj.
	Pulv. Opii.	℈j.
	Mucil. Gum Acac.	q. s.
	M. ft. pil. No. xij.	One every two hours.

Her prostrated condition was such as to demand the free exhibition of stimulants, in order to sustain the faltering energies of life. Brandy and arom. spts. ammon. were given *pro re nata*. At the same time I ordered an injection every three hours, of gr. ij. nitrate of silver dissolved in ℥j. warm water, mixed with a gill of tepid milk. At the expiration of twenty-four hours from the adoption of this treatment, I found an evident amelioration of the distressing symptoms. The evacuations were less frequent, and there was a decided mitigation of the tormina and tenesmus. I was encouraged to repeat the prescription, but prolonged the time of giving the pills to three hours, and omitted the injections. The discharges soon after exhibited the characteristic dark appearance, the effects of the remedy, and contained less mucus. The symptoms gradually abated, the secretions became natural, and in a few days the patient was entirely out of danger.

The next case was that of a daughter of Mrs. T. æt. 10 years. She had been confined about a week; condition much the same as that of her mother. Ordered the same prescription, observing a differential proportion. The improvement, for the first twenty-four hours was not so marked as that of her mother; and observing a want of action about the surface, I concluded upon the following:

℞.	Nitrate Argent. Crys.	gr. iiss.
	Salph. Morph.	gr. i.
	Vin. Ipecac.	℥i.
	Aquæ Camph.	℥i.

M. A teaspoonful every two hours. At the same time ordered a warm bath. This had the desired effect. Free perspiration followed; the alimentary secretions improved; and in a short time she also recovered.

Few days after, saw Mr. M——, æt. about 45, in consultation with Dr. Donahu. He had been laboring under dysentery some twelve days, and was much prostrated. Pulse 130; abdomen tympanitic, though not tender upon pressure; had discharged on the day previous a large quantity of fatty matter, having the consistence

of healthy pus, but inodorous; tongue dry, and covered with a thick white coat; the papillæ prominent; sordes upon the teeth and gums; his whole surface covered with a fœtid clammy perspiration. He had had the full benefit of the calomel and opium treatment. Typhoid symptoms were present, and it was evident there was a decided downward tendency.

The treatment adopted in case first was decided upon, and the results were equally fortunate.

I deem it unnecessary to extend this article, by a detailed history of other cases, with like symptoms, treated by the same curative agent, and resulting alike satisfactorily. Sufficient, I think, has already been adduced to recommend the agent as one at least worthy of trial. I might mention that I suggested the remedy to several neighboring practitioners, and so far as I have heard, its administration, in the conditions before specified, was attended with uniform success.

In obstinate diarrhœa of infants, it has proven in my hands an excellent remedy. In advanced stages, where the prostration and emaciation is extreme, dejections frequent and watery, I have exhibited the following mixture with admirable results.

℞.	Argent. Nitrat. Crys.	
	Sulph. Morph. *aa.*	gr. ij.
	Gum Arab.	ʒi.
	Sacch. Alb.	ʒij.
	Aquæ.	f. ℥iij.

Ft. mix. Teaspoonful every three hours to a child three years old.

Case of Arrested Muscular Development. By P. K. Huntington, M. D., of Perry, Wyoming County, New York. (Communicated by Prof. J. K. Mitchell.)

Mr. Benedict, a young man, aged 22 years, of good habits, has had, without any apparent cause, for the last eight years, no developement whatever of the muscles of the thighs and pelvis, and also of the arms, while those of the leg, fore-arm, foot and hand, and also of the back, are fully developed. The gastrocnemii are very large indeed, resembling much those of an opera dancer, while the muscles of the thigh, including the glutei, are

flaccid and shrunken, resembling those we find in the limbs of a person in the last stages of phthisis. The contrast between the arm and fore-arm is not quite so striking as that of the corresponding parts of the lower extremities, yet it is very apparent to any observer.

He complains of no pain or inconvenience whatever, and suffers only from the weakness which necessarily attends such debility of the muscles.

Whenever he rises from a sitting posture to a standing one, it is done by the assistance of the upper extremities, and a sort of springing motion. He cannot step up a common stair without a very great effort, accompanied also with a sudden spring. To raise himself from the stooping posture is impossible without extrinsic mechanical aid.

There is no apparent difference in the sides of his body; both seem affected alike.

He imagines that the muscles affected are less in size than they were eight years ago, but whether this is really the case, or whether it has been merely an arrest in the developement, while the rest of the body has been developed naturally, is as yet a question unanswered.

I have searched the works to which I have access to find an analogous case, but in vain, for I can find nothing which even approximates it.

I would advise him to visit your city, were I satisfied that any medical aid would benefit him.

With this concise description, therefore, I wish to submit the case to you, asking your opinion in regard to the propriety and probable success of medication.

Case of Lactation in a Male. By C. W. Hornor, M. D., of Philadelphia. (Communicated by Professor Dunglison.)

Dear Sir,—According to your request, I send the particulars of the case of lactation in an adult male. It occurred in the person of an athletic American, named Charles Collins, aged 22 years, a blacksmith, working at his trade in New York. About the 10th of February last, his attention was first drawn to his left breast, which appeared to be enlarging, and continued to increase in size

for three weeks, when he came to Philadelphia. After being in this city for three weeks, he became quite anxious in regard to his condition, for although he suffered very little pain, the mamma had become quite as large as that of a female nursing. He therefore, through the persuasion of an aunt, was, on the twenty-third of March, induced to apply at the Clinic of the Jefferson Medical College to consult the faculty of that Institution. His case came up before Prof. Mütter, who, upon examination, found the mammary gland largely developed, and filled with the lacteal secretion, which differed in no wise from that of a mother. He could assign no cause for this freak of nature; his health was very good, and the other breast natural. A soap plaster was prescribed, and compression ordered to be kept up, which he persisted in for full six weeks, when the gland returned to its usual size; and when I saw him this morning at Fairmount, where he now resides, it was in every respect like the other.

BIBLIOGRAPHICAL NOTICES.

SOUTHERN MEDICAL REPORTS: *Consisting of General and Special Reports of the Medical Topography, Meteorology and Prevalent Diseases in the following States: Louisiana, Alabama, Mississippi, North Carolina, South Carolina, Georgia, Florida, Arkansas, Tennessee and Texas; to be published annually.* Edited by E. D. FENNER, M. D., of New Orleans, Member of the American Medical Association, &c. &c.

(Concluded from page 422.)

In article twelfth we have an account of the New Orleans Charity Hospital. The extent of this hospital and its means of relief may be inferred from the fact, that, in 1849 the total admissions were 15,563; total discharges, 12,134. The deaths during the same time were 2,739. This shows a mortality of 17½ per cent. of the admissions—a large rate, but it occurred during the prevalence of one of the most destructive diseases—cholera. Many were admitted in a moribund state, or beyond the reach of remedies.

Of the above number of patients admitted, there were from

United States, - - - - -	1,782
Foreign countries, - - - -	13,034
Unknown countries, - - - -	142

The number of natives of Louisiana who were inmates of the hospital, was only 147. In how many ways is this great country the refuge of the people of the old world!

In another article, the organization of the State Medical Society of Louisiana is mentioned, and the nature and character of the standing committees are specified. They evince a laudable determination on the part of the physicians of Louisiana to keep up with the requirements of the present time, for the support and extension of the different branches of medical science.

All the reports hitherto noticed are from Louisiana.* Next follow those from Alabama. The initial one, by Dr. Bassett, on "the Climate and Diseases of Madison County," consists of much useful description, pointed and sometimes irrelevant references, and clinical reports. His biblical commentaries on the use of chloroform are at least amusing. When quoting the authors by whom cold bathing is recommended in Scarlatina, Dr. Bassett might have included Dr. John Bell, who, probably more than any other American physician, has emphatically exhibited its efficacy, first in his work on Baths and Mineral Waters, and subsequently in his published Lectures on the Theory and Practice of Physic, and in his late Treatise on Baths and the Watery Regimen.

The second article of the "Reports from Alabama," is entitled "Contributions to the Vital Statistics of Mobile, by George A. Ketchum, M. D." The mortality among the white population is much greater than among the black; and, in the former, more among the males than the females. The disparity in the case of the white males may be accounted for by their greater number, owing to so many of them coming without families to Mobile, to engage in business.

"Among the blacks the greatest mortality is among the infants under one year of age, and next between one year and ten."

Next comes an account of the Mobile Medical Society, and an

* The repetition before each article of the general heading, "Reports from Louisiana," is unnecessary. It would be enough were it to precede article first.

Abstract of its Proceedings. These consist of notes of interesting cases and remarks of the members, embodying, altogether, much useful information.

" Dr. Ketchum related the following instance of precocious development that he had met with in a family of negroes. The mother, Diana, was just thirteen years of age when her first child was born. This child, Tyra, was now twelve years and three months old, and has been menstruating eighteen months. She was three months advanced in pregnancy. Her breasts are large and full, though otherwise she has the appearance of a young girl of eight or nine years of age. Her younger sister, Mary, is just nine years of age, and has been menstruating regularly since the spring of 1848. If Tyra carries her fœtus until term, her mother will become a *grandmother* before she is twenty-six years of age."

Cases were related by Drs. Walkly, Ketchum, Ross, Anderson, and R. L. Fearn, the President, in which chloroform had been used with success. One was of " convulsions in a small child, in which all the usual remedies had failed to procure relief, and the child was fast sinking. He had chloroform administered by inhalation, and the convulsions had ceased, and the child had up to this time remained free from any recurrence of them." Dr. Walkly related another instance of the good effects of this treatment in the case of a child, fourteen months old, in whom the convulsions were confined principally to the right side. Dr. Anderson adduced a case coming under his own observation, confirmatory of this practice. The administration of the chloroform was kept up several hours, " on account of the tendency that the convulsions manifested to return. He thought that about ℥i. of the article had been used."

" Dr. Fearn reported two interesting cases of labor in which he had used chloroform with much benefit."

Dr. Ketchum has used chloroform successfully " in a violent case of hysterical convulsions occurring in a young woman, twenty-one years of age;" also " in a case of tedious and difficult labor." He found the topical application of chloroform to give relief in a very painful neuralgic affection of the face and one side of the scalp. "The patient was entirely relieved by wetting a handkerchief with a few drachms of the article, and applying it along the painful course of the nerves"—[the course of the pained nerves."] This article was used by Dr. Walkly in three cases of *trismus nascentium*, but without any good effect.

A case of nyctalopia was described by Dr. Ketchum, in which he gave a purgative of blue mass and rhubarb in the evening, and on the following morning fifteen grains of quinine were administered. "There was no return of the affection from this time."

The fourth article from the Alabama Reports, consists of Transactions of the State Medical Association, in the form of reports on Topography, Meteorology and the prevalent diseases. Dr. Fenner, after speaking of them in high terms, says: "They have been published in the New Orleans and Augusta Medical Journals, from which we shall select such as we think are most valuable."

An advantageous specimen of these reports is furnished in the paper by Dr. Bates, "On the prevailing diseases of a portion of Dallas County. Read before the Alabama State Medical Association, at its sitting in Wetumpka, on the 7th and 8th of March, 1849."

In the treatment of Bilious Remittent Fever, Dr. Bates rarely practices general bloodletting, unless in cases complicated with engorgement of internal organs—quite a common condition of things, he might have added—when local depletion is had recourse to. His course is a mildly antiphlogistic one. So soon as a remission is observed, he gives sulphate of quinine, and if there should still be some excitement, he combines with this article a small portion of ipecacuanha and morphia.

"Of the 16 cases of typhoid fever that came under my notice, 6 were whites and 10 were blacks; all adults. Of the former, three proved fatal; of the latter, five. There were two cases occurring among the whites, and the same number among the slaves, that I term malignant typhoid, in contra-distinction to the others, from the severity of the symptoms and the rapidity of their course. The symptoms were different from those we usually see in typhoid fever, and in some respects assimilated those of malignant bilious fever. It is a difficult matter, I apprehend, to explain the combination of appearances, unless we suppose that the causes which produce remittent fever, modified considerably the idiosyncrasy of the individual in whom was developed the typhoid type."

Details of these cases are given by Dr. Bates.

Congestive Fever is next described by the author, who gives his views of its pathology, and the treatment which he adopts for its cure. There is no lack of active medication: "quinine and stimulants, with camph., opium and aromatics, are administered in-

ternally; while sinapisms, the hot air bath, dry frictions, and blisters to produce their full rubefacient effect, are applied to the extremities, spine and epigastrium. The patients bear quinine in large doses admirably, and I have frequently given 100 grains in a few hours without any other complaint than a little ringing in the ears. After reaction is in a measure effected, calomel in small doses, with opium, is given to correct the secretions, if necessary, while the quinine is continued to prevent a recurrence of the collapse. Perfect rest is enjoined the whole time."

In the treatment of the anginose variety of scarlatina, Dr. Bates recommends a mild antiphlogistic treatment—a mild laxative and a soothing diaphoretic, sometimes sponging with cold water. If the throat was greatly inflamed, "the tonsils were scarified with a common gum lancet, and then touched with a camel's hair brush and a solution of nit. silver, 10 grains per ounce, three times daily, until the soreness had in a measure disappeared. In some instances, the solution was gradually increased in strength from 22 to 25 grains. In not a solitary instance, where this course was pursued, was there ulceration or chronic engorgement, or enlargement of the tonsils, after the subsidence of the disease."

Georgia furnishes her contribution to these reports in a long and elaborately written paper by Dr. Pendleton, entitled "A General Report on the Topography, Climate and Diseases of Middle Georgia." In the positive, we are favored by the author with a description of the soil, face of the country and atmospherical states of the region. In the speculative and conjectural, he entertains us with his views of miasmata and the etiology of periodical fevers. The first is fresh and original; the second places him in the crowd of those who travel in the road of hypothesis.

The diseases of Middle Georgia have undergone, as we learn from Dr. Pendleton, a considerable change within the memory of man, both as regards their pathology and general fatality. "Formerly bilious remittent fever was a very fatal type of disease; now, I hesitate not in making the assertion, that uncomplicated remittent fever, as it prevails in Middle Georgia, never proves fatal, under a judicious and scientific treatment, if taken in time. I doubt not the virulence of the disease has greatly abated in late years, and even under the old plan of treatment, the mortality

would not now be so great. But when we remember that the sole object of the practitioner of that day seemed to be to mercurialize his patient—particularly if one or two heavy charges of drastic purgatives did not succeed in ejecting the enemy, and during the whole course not a drop of cold water was ever allowed, no matter how dry the tongue or how burning the thirst, we wonder no longer at the greatness, but rather at the smallness of the mortality. Luckily for suffering humanity, a few wise heads soon discovered that every patient who obtained water by stealth, recovered, and those who did not, died, or suffered long before recovery; a consequent modification was made in the treatment, which has been still farther improved upon, under the benignant light of the Broussaian philosophy, until the monster has become a mere child, to be throttled and overcome by every tyro in medicine."

As regards the morbid effects of particular seasons on the animal economy, Dr. Pendleton, referring to the district described by him, tells us "what has grown to be an adage in the Southern States, that a wet spring and summer, with a dry fall, will produce a sickly season."

"Of what are generally termed idiopathic fevers, we have the common continued, inflammatory, bilious remittent and intermittent—the first two prevailing mostly in the cold months, and the last two in summer and autumn. The common continued fever frequently takes on a typhoid type after the first or second week, and hence has received that name by many physicians throughout the country. It is better known among the common people as the '*slow fever*,' from the tedious course it runs, frequently terminating either favorably or unfavorably at the end of the fourth or fifth week. I doubt not the true pathology of this disease is a sub-acute inflammation of the mucous membranes, originating in atmospheric vicissitudes, or supervening on the partial subduction of more violent fevers. The stimulating plan of treatment, as brandy, morphine and quinine, has consequently resulted most disastrously to all who have been brought under its influence. On the contrary, the *expectant* plan, of gentle antiphlogistics and counter-irritants, has relieved at least 19 cases in 20, as my tables will show."

Dr. Pendleton exhibits, in a tabular form, the number of cases of the different diseases which occurred in his practice in Hancock County, since 1843, and next of those of the deaths. We insert his summary view of the proportionate mortality. "Thus, out of

2,039, we have 60 deaths, being 2.94 per cent. The mortality of diseases of the digestive organs is 3.33 per cent.; the respiratory, 5.89; diseases peculiar to women, 3.2; brain and nervous system, 5.2; eruptive fevers, 4.4; idiopathic fevers, 0.34; and urinary, 1 in 52. It is remarkable that the mortality of idiopathic fevers is so small—there being of periodic fevers not a single death—of continued fevers, only 2 in 44; making a mortality of 4.4 per cent. This latter embraces that fearful type of fevers generally denominated typhoid. The result of the table certainly speaks volumes for the healthiness of our region in comparison with many other sections of the South."

Dr. Pendleton has written "On the Susceptibility of the Caucasian and African Races to the Different Classes of Disease." This paper first appeared in the Southern Medical Journal, and is now transferred to the "Southern Reports."

"The ratio of deaths, according to the number of cases, is 2.57 for the whites against 3.54 for the blacks." The whites are more subject to diseases of the primæ viæ than the blacks; the latter more to pulmonary affections than the former. There is greater call for medical assistance from the negro than from the white women, in the proportion of 15.2 to 10.5 per cent. The blacks are more subject to rheumatism, urinary affections and diseases of the teeth. The whites are much greater sufferers from idiopathic fevers, also, by a small per centage to diseases of the eye and exanthematous affections.

"With regard to the sexes, we find that the males are more subject to diseases of the digestive, respiratory, urinary and visual organs, as also the brain and nervous system, while the females, apart from diseases peculiar to them, are more liable to the exanthemata, rheumatism and diseases of the teeth. The females predominate over the males by a considerable per cent., in the general liability to disease. Thus, out of 1549 cases, we have 924 females, against 625 males. Abstract from those 204 for diseases peculiar to women, and they still have a considerable ascendency. But the diseases of females are less fatal in their character than those of males. Thus, out of the 924, we have 26 deaths, or 3.2 per cent. of females—while out of the 625, there are 20 deaths, or 3.2 per cent. of males."

"Perhaps the most remarkable fact connected with this table, as relates to the sexes, is the great preponderance of the males in idiopathic fevers. This being as 20.6 per cent. against 9.6; more than two to one."

Dr. Pendleton concludes his instructive paper in a tone of Christian philosophy, in the monition furnished to us by the infirmities of age and the more sudden inroads of violent disease:

"The lesson it teaches us of our mortality, is too obvious for the wise not to heed its healthful instruction and solemn warnings, and the good physician should always carry about him a medicine 'to minister to the mind diseased.' It is not found in our apothecaries' shops, nor is it indigenous to this clime; but still it may be obtained 'without money and without price.' It is the Elixir of Immortality."

"A Strange Case of Insanity," is the heading of a brief narrative of insanity, induced in a lady in Georgia, by fright from falling from a carriage. She was for some time in the Bloomingdale Asylum, but returned home without being cured of her malady. Her disposition had become, contrary to her wont, gay; and in conversation she evinced great sprightliness and wit. The house in the country in which she was residing took fire and was burned. But this disaster, by giving rise to terrible fright, "completely restored her to her right mind."

The organization and the names of the officers of the State Medical Society of Georgia, are furnished at page 344.

Under the head of Reports from Mississippi, we find an account of "the Topography, Meteorology and Climate of Jackson, the capital of Mississippi." By Dr. S. C. Farrar.

The author of this paper gives a lively sketch of the state of society and the causes of disease, and the defects of medical treatment, in the early settlement of Jackson, which, by the way, dates no farther back than 1832; and he contrasts them with the improvement in all these particulars at the present time. A large influx of both white and black settlers, the latter being slaves, unacclimated and over-tasked; the first owing to various speculations and anxious efforts to better their fortunes—the second to excessive field labor, furnished large materials for disease, the victims to which were increased by intemperance. "At almost every cross road a small cabin was erected, which, in common parlance, was denominated '*a dogery.*'"

Old physicians retired from practice; others abandoned it to engage in the less arduous and more attractive work of speculation. "Young physicians flocked to the State, chiefly from the schools of Lexington and Philadelphia, thoroughly indoctrinated with the pecu-

liar opinions as to the origin and treatment of fever, entertained by two distinguished Professors filling the chairs of the practice of medicine in those schools; hence, in the treatment of fever, the lancet was frequently unsheathed, and calomel administered in large and repeated doses. When this failed to cure, ptyalism was resorted to; and that powerful anti-periodic, the Sampson of the materia medica in malarial fevers, quinine, was given in comparatively insignificant and feeble quantities. Up to this period, few if any had ventured to prescribe it in the heroic and jugulating doses of the present day."

The contrasted and gratifying picture to all this is given in the following terms by Dr. Farrar:

"Since then we have become better acquainted with the pathology and treatment of Southern diseases—we resort less to the lancet and heavy doses of calomel. We rely only on aperients, diaphoretics, opiates, salt water, enemata, cold drinks, sponging with cold water, affusions of cold water, sinapised foot baths, occasionally dry and wet cups and blisters; but above all, on the use of *quinine in sedative doses*. Since this change in practice, our intermittent and remittent fevers are more manageable, and even that terrible disease, *algid malignant intermittent* or congestive fever, has lost much of the horror it formerly inspired, and is far less intractable. But we are also exempt from many of the corroding cares and anxieties of 1833 and 1834, those years of speculation, when we were buoyed up one day with the expectation of riches by some lucky turn in the wheel of fortune, and the next, depressed by blighted hopes and ruined prospects. Now we enjoy more composure, we are better lodged and fed than formerly; our bodies are invigorated by labor and exercise; our supply of food is abundant, varied and wholesome, we are not constantly *upon the alert* for persons to victimise by bargain and trade; the days of banks and chimerical prospects have passed by, and now, *with few exceptions*, our citizens look not to lucky speculations nor to the placers of California, but to the bowels of our own soil, for gold. Most of the liquor-shops have been abandoned, demolished or converted to other purposes; and in every hamlet and town of the State, the Sons of Temperance have unfurled their banner, bearing on its ample folds the motto, '*love, purity and fidelity.*' They visit the habitation of the intemperate, carrying in their bosoms the feelings and sympathies of the good Samaritan, and on their tongues the language of love, and hope, and consolation. They admonish, they entreat the intemperate to abandon their habits, and flee the path that leads to ruin, disgrace, disease and death. Their friendly counsels make a deep impression, and frequently the inebriate is reclaimed, and goes forth again into society, with the sentiments, and aspirations, and dignity of man.

Now, acclimation, good food, pure water, exercise and temperance all contribute to render us less liable to disease; and when it comes, the system responds more readily to medicine."

Dr. Farrar describes an epidemic of measles which began in January, 1849, and prevailed for some weeks; and also one of erysipelatous fever, "the black tongue" of some writers, which appeared in February of the same year.

An overflow of the banks of Pearl river, on which the town of Jackson is situated, followed by a recession of the water, was productive of intermittent fever, from which scarcely a family escaped. Dr. Farrar, strengthening his remarks by the experience of Cleghorn, says, that "no disease is more disposed than tertian intermittents, to present anomalous symptoms, or to appear with a portion of the livery of other diseases." If it were necessary, this position might be still further strengthened by reference to Torti, Alibert, and others, who describe masked intermittents, (*febres larvatæ.*)

The second report from Mississippi is an article on Epidemic Cholera in the vicinity of Natchez. By C. H. Stone, M. D. This will repay perusal, but we have room for only one extract:

"A comparison of the different reports will no doubt show *the almost simultaneous formation of the cholera poison throughout a great, if not the whole, extent of the valley of the lower Mississippi;* not travelling *up* the river from New Orleans, nor *down* from Memphis or Vicksburg, but like a vast, dread pall, impending over this great valley, and settling here and there, first on its heart and great trunk, then its numerous rivers, lakes, and extensive plains, shrouding thousands in death."

Following this paper is another on Epidemic Cholera and its Preventive Treatment. By G. S. Magoun, M. D. It has the merit of brevity. He designates it as "a crude essay." He is either too modest in thus underrating the value of his production, or he is too frank in telling his readers what little pains he has thought necessary to take for their edification.

Dr. Clemens, of Macon, Mississippi, relates an operation for the removal of one half of the inferior maxilla, for osteo-sarcoma. The subject was a negro, aged about thirty-seven years. Dr. C. first saw him in June, 1847, and learned that the disease had begun to show itself in February, 1845. The use of iodine was persevered in for nearly a year, but without any good effect. The general health was much improved under the use of tonics, prescribed by Dr. C. On the 12th of September, 1847,

Dr. Clemens performed the operation of removal of the diseased bone "by sawing through just beyond the angle on one side, and near the symphysis of the chin on the other." On October 14th the wound had entirely healed, and the patient was discharged, apparently quite well. This is the first chapter in a surgical operation beyond which the narrator sometimes forgets to publish. The second, far from being an uncommon one, tells a different story, viz. of renewed disease, declining health, and finally death. Dr. Clemens, with becoming honesty of purpose, continues the history of this case, by telling us of his having, in April, 1849, seen the patient, for such he had then become, who complained of severe pain in the ramus of the maxilla on the side from which the tumor had been extracted. The advice of Dr. C. to have the affected bone removed at the articulation, was neglected. The disease continued to make rapid progress—a tumor larger than a man's fist had grown out, and the integuments at the lower part were ulcerated, and a dark fungus protruded. This was the state of things in August, when Dr. Clemens performed another operation, after having placed the patient under the influence of chloroform, and the carotid artery tied, as a precautionary measure, at the point where it is crossed by the omo-hyoid muscle. The operation is thus described:

"I now made an incision, commencing over the articulation and carried downwards along the posterior margin of the tumor, terminating at a point about midway between the angle and symphysis. Another incision was then made, commencing just below the first, and carried along in front of it, (so as to include the cicatrix of the former operation,) and terminating with it. The tumor was now separated, as far as practicable, from its attachments, the capsular ligament of the joint divided—the tumor turned over from behind, forward, pressed downward, the temporal muscle divided at its insertion, and the removal was effected.

"The hæmorrhage was very trifling. The cavity was lightly filled with lint, and the edges of the wound brought in apposition with sutures and adhesive strips, and the parts supported with a light bandage. The healing process went on rather slowly, though by the fortieth day the wound was healed throughout. The ligature around the carotid came away on the twenty-fifth day. On the forty-second day from the operation the patient was again discharged, apparently quite well."

Notwithstanding these flattering appearances, in the course of three months the upper jaw on the same side became the seat of

disease, manifested by fever, and a tumor nearly the size of a hen's egg. The general health had again become bad. Under all the circumstances of the case, Dr. Clemens wisely declined any farther operation for the relief of the patient.

Dr. Joseph J. Pugh communicates a brief account of the "Artesian Springs" in Madison county, Mississippi. The water is *acidulated* chalybeate. Dr. Pugh bears testimony to its beneficial operation in various diseases—debility of the digestive organs, including diarrhœa and dysentery, also menorrhagia, amenorrhœa, fluor albus, functional diseases of the kidneys, unattended by inflammation; also in cutaneous affections, and in the distressing gastric irritation consequent on uterine diseases.

The first and only report from Tennessee is "On the Commencement, Prevalence, Fatality, Treatment, &c., of Pestilential Cholera, in Memphis and its vicinity; with the prominent facts bearing upon the unsettled question of its imported or domestic origin. By Lewis Shanks, M. D., of Memphis, Tenn."

Dr. Shanks advocates the contagious nature of cholera, basing his opinion on the facts observed by him and others, respecting the diffusion of the disease along the Mississippi and its tributaries. He writes:

"The question might fairly be asked upon this statement of facts —If cholera was not imported here from New Orleans—if it originated here from epidemic influence—why should nearly all the cases, for the first fifteen or twenty days, have occurred on a string of landing some two miles in length, contiguous to the steamboat channel, and no cases occur in the town, only a few hundred yards distant from the landing, but the two under the circumstances specified?"

From South Carolina, Dr. Thomas Y. Simons, of Charleston, sends a Report, which, by the way, first appeared in the pages of our able contemporary, the *Charleston Medical Journal and Review*, for September, 1849. It is entitled "Observations on the fever which is developed in the city of Charleston after exposure to the country air, during the summer and autumn, and which is hence called Country Fever."

The treatment of this fever is briefly sketched by Dr. Simons as follows:

"My plan is, if the bowels are confined to give a good mercurial purge of rhubarb and calomel, and upon the remission of the fever

to give two grains of quinine every two hours, until a sense of ringing in the ears or partial deafness ensues, or until the exacerbation supervenes—keeping the liver secreting by the use of blue pill every four hours during the day, and the bowels relieved when necessary, by injections; avoiding active cathartics, if possible. This plan is continued until the fever is arrested, which I have found generally to be after the second or third invasion. Sinapisms, blisters and rubefacients, or cold evaporating applications, are used likewise when indicated. I should not hesitate to use bleeding generally and topically during the exacerbation, but I deem these should be done in the earlier stage of the disease."

The author offers some judicious remarks of a prophylactic nature, and concludes his paper by the following suggestion.

"It is, to ascertain the localities which are healthy and those which are liable to fevers—the means of preserving the health of those which are now healthy and of correcting and ameliorating those which are sickly. It is a noble and philanthropic object, and one which should bring forth the energies and observation of every intelligent physician in the State. The State Medical Association has appointed a committee as regards this subject, which committee, it is to be hoped, will receive ample materials of information in the different districts and parishes in the State."

We can only state the fact of the appearance in these Reports, of an instructive paper on the Yellow Fever of Charleston, S. C., in 1849, by the editor of the Charleston Journal, in which it originally appeared.

Dr. Holmes, of Maybinton, S. C., gives his experience of the good effects of nitrate of silver, especially applied in anginose affections; of strychnine in paralysis; and belladonna in pertussis.

The next article is a brief notice of the organization and proceedings of the South Carolina Medical Association.

We may anticipate the collection and publication, in a few years, of an immense body of invaluable matter on the Medical Topography and Climate of the different sections of nearly every state in the Union, obtained through the methodical observations made by their Medical Societies.

Texas sends a report from Dr. Wright, surgeon in the United States Army, on "the Topography of San Antonio, and the epidemic cholera that prevailed there in the spring of 1849."

Dr. Wright begins his paper by appositely remarking: "He

who would sit down to write a paper on Cholera Asphyxia, at the present day, finds himself in many essential respects, like him, who would indite a treatise on variola, or pertussis, or intermittent fever; or like him who is constrained to elaborate a Fourth of July oration, or a eulogy on General Washington." Still is Dr. Wright, writing from personal observation, worthy of being read.

Dr. Jarvis, surgeon United States army, sends his quota, in the shape of a "Report on the rise, progress and decline of epidemic Cholera in the valley of the Rio Grande." The remarks just made regarding Dr. Wright, applies to the author of this paper.

The portion of the volume before us, called Excerpta and Miscellanies, consists of 1. "Experimental Researches on the action of quinine, especially in large doses. A memoir submitted to the Academy of Science.—By M. Brecquet. Report of MM. Andral, Rayer, and Lallemand. 2. On the treatment of the West India remittents and intermittents by quinine. By Dr. D. Blair, of Demarara. 3. Does calomel really expel the biliary secretion? By Dr. Michea. 4. The law relating to the importation of adulterated drugs, medicines, and chemical preparations into the United States."

It is very justly remarked in the opening sentence of article 4th, "The medical profession, as well as the entire community throughout the Union, are greatly indebted to Dr. T. O. Edwards, late member of Congress from Ohio, for his indefatigable and finally successful efforts to procure the passage of this most salutary and important law." Our readers will see, by reference to our advertising sheet, that Dr. Edwards has returned to the ranks of the profession, and will bring his talents and attainments into the service of the Medical College of Ohio, in which school he has been appointed Professor of Materia Medica and Pharmacy.

Notices of the medical colleges of the south and south-west, and of American medical journals, conclude the volume of "Southern Reports."

The pains which we have taken to exhibit to our readers the chief features, and most interesting details of the first volume of Dr. Fenner's *Southern Reports*, are the best proof of our desire to see a second volume next year. It would be a source of pleasing reflection to us if we could believe, that the language of praise and occasional criticisms which we have uttered, will encourage him in his future endeavours, and furnish him with hints to make his subsequent course more easy.

Essays on the Puerperal Fever, and other diseases peculiar to Women; selected from the writings of British Authors previous to the close of the eighteenth century. Edited by FLEETWOOD CHURCHILL, M. D., M. R. I. A., &c. &c. Philadelphia: Lea & Blanchard, 1850. (*Reprint from the Sydenham Society's last publication.*)

Dr. Churchill's collection of essays, taken from the written experience of seven distinguished physicians, on the subject of puerperal fever, is in every way worthy the respect of the profession. The author has not only given us the various monographs on the disease, commencing with that of Dr. Denman on the sickness of 1768, and terminating with Dr. Gordon's well known essay on the epidemic puerperal fever which occurred at Aberdeen in 1789, but he has greatly enhanced the value of the work by adding to the selected matter a short, condensed, but very interesting historical sketch of the different epidemics of puerperal fever which have at different periods swept off the unfortunate inmates of the various lying-in hospitals of Europe. He commences with a description of the fatal effects of this disease, and the mournful impression produced upon his mind by witnessing its ravages; "a picture," he adds, "whose gloom is heightened by the inutility of all precautions to guard against its attacks, and, in the majority of cases, the utter failure of all attempts to arrest its progress, or to prevent its fatal termination."

Impelled by such feelings, Dr. Churchill has presented to the reader a selection of such works upon the subject as in his judgement is best calculated to afford a complete view of the disease in itself, and especially of the aspect it presents when it occurs epidemically; and not only so, but by selecting descriptions of the various epidemics of England, Ireland and Scotland, the various characters of the disease, and its particular modifications are illustrated by those who witnessed them.

Dr. C. disclaims all intention of compiling a treatise on puerperal fever, his sole object is to collect the principal facts connected with its history as given by persons who witnessed its desolating course, and thereby afford the student and physician of our own time an opportunity of comparing the symptoms, treatment and mortality of the different epidemics, in order, if possible to do

away with that one sided view of the disease which persists in asserting that child-bed fever is inflammation and nothing but inflammation, an infatuation which we sincerely hope has nearly satiated itself with human blood.

However, we will not anticipate our author, but suffer him in due time to speak for himself, not having the vanity to suppose, though we have often felt as he feels, that we can write upon the subject with the same force and clearness.

According to our author, the first undoubted epidemic of puerperal fever on record is that which prevailed in Paris during the winter of 1746; it was extremely fatal, attacking the poor, and proving much more fatal to those *in hospital*, than to those who were delivered at their own houses. Of twenty women, in February of that year, in the Hotel Dieu, scarcely one recovered; they died between the 5th and 17th days after their confinement. As the post mortem appearances described afford nothing particularly new to the instructed physician of the present day, we do not think it desirable to consume our necessarily confined space by quoting them.

The treatment of the disease is not given.

After this we have a long list of successive epidemics, as they have occurred in the different lying-in hospitals of Europe, but as they are little more than a list of dates without detail, either of symptoms or of treatment, of course it would be useless, in a general review, to do more than allude to them as a portion of the history, though their perusal, we make no doubt, would greatly interest the enthusiastic student of the result.

The author, however, quotes largely from a M. Tenon of Paris, who says that "two distinct forms of the disease were successively observed in the years 1774–5. One a simple form, which was cured by ipecacuanha," which we should be inclined to suspect was not the disease at all; "the other, a complicated form for which there was no remedy, so that there perished one of every seven of those who were attacked, and death took place from the sixth to the eighth day, and often much earlier.

The following quotation is a good description of the symptoms of the milder cases:

"The first symptoms manifested themselves twenty-four, thirty-six, or forty-eight hours after delivery, and sometimes, but rarely, in

the space of twelve hours. The symptoms of the simple puerperal fever are developed in the following order: rigor, slight pain in the kidneys, intestinal colic, which in two hours affects the whole hypogastrium, and gradually becomes more acute, pulse concentrated, fever moderate, lochia not suppressed, mammæ flaccid, tongue dry in the middle, covered with a yellow mucous on the edges, hiccup and vomiting of green colored matter. There was sometimes combined with these constant and characteristic symptoms, a diarrhœa of a bilious glairy matter, a considerable swelling of the hypogastrium, thirst, and remarkable retention of urine.

"In the complicated puerperal fever the pyrexia is more intense, with exacerbations; the tongue is black and dry, the belly is tense, distended and tympanitic and slightly painful. In some women the lochia have been either wholly suppressed or only diminished, others have experienced attacks of ophthalmia, in some the respiration was difficult, in general the blood showed the buffy coat.

"On opening the abdomen, the stomach, and intestines, particularly the small intestines, were inflamed, adhering to one another, distended with air and a yellow fluid matter. The uterus was contracted to its ordinary dimensions, and was seldom inflamed. I had occasion to dissect two; in one, the uterus contained a coagulum of blood; an infiltration of a milky appearance, or whey-like fluid, existed in certain women, in the cellular tissue surrounding the kidneys. Sometimes also a thick white cheesy matter was met with. When the lungs were gorged with blood, or inflamed, or emphysematous, an effusion of serum was found on each side of the chest. We did not observe the hemorrhages which occurred in the epidemic of 1664, and the uterus was not found dry and hard, and tumefied, as in that of 1746. In the epidemic of 1774 the lochia flowed, but they did not flow in 1746."

This valuable description blends together more than one epidemic, but as the disease is stated to have presented the same characters, the author has chosen to quote it in this place.

In the year 1782 the Royal Medical Society of Paris made a report to the French government on M. Doulcet's method of treatment, whose remedy it appears was an emetic of ipecacuanha, followed by a gentle purgative, which is said to have been very successful. This certainly leads us to infer that most of his cases must have been of a very mild character.

From the year 1765 to 1775, puerperal fever appears to have prevailed in Derbyshire and the adjacent counties. Butler describes it, but its course must have been unusually mild, as Dr. Butler states that "ten grains of rhubarb and ten of aromatic con-

fection, given every day until the stools became natural, never failed to effect a cure." He objects to bleeding, very naturally, as the affection he describes must have been comparatively trifling. Dr. Gordon's cases in the epidemic at Aberdeen, 1789, are mentioned, with the treatment, which every body knows was bleeding—prompt and decided bleeding—irrespective of the state of the pulse; but as Gordon's valuable treatise has been for years in the hands of every practitioner in the United States, and as it is reprinted in the book, we shall make no further comment on it.

"Dr. Gooch has furnished us," says the author, "with the experience of Dr. Lowder, who practiced in London about this time." He, Dr. Lowder, "thought that the inflammation was erysipelatous, and the fever typhoid. When the inflammatory symptoms were well marked, he permitted a few ounces of blood to be drawn, but if the symptoms were typhoid, bleeding was positively injurious, he mentioned it as the assertion of many medical men that *all* the patients who were bled died. When the fever was typhoid, he recommended bark, and mentioned two cases apparently hopeless which recovered by taking daily a gallon of the decoction."

In 1809–10 Hey lost eleven patients out of fourteen, only three recovering; this was before Mr. Hey adopted Dr. Gordon's plan of taking blood largely at the beginning; he afterwards by the blood-letting practice saved fourteen out of seventeen. This was certainly being very successful, but we are much inclined to suspect, (though we approve highly of the sanguineous depletion in some cases) that he had to deal with a much less fatal form of the disease than when he saved but three out of fourteen; medical gentlemen are very fond of parading their successes, but they are not always so ingenuous as to tell us *all* the causes of their success.

We must apologise for the length of this list of epidemics, but though it may weary the mind with its monotony, it has the advantage of showing us what an amount of difference of opinion exists in the treatment of this disease; how different the various epidemics are in character; and that although large abstractions of blood may in one case be the only means of saving our patient, yet in another, so far from being beneficial, they will only hurry the miserable sufferer to her grave.

The author makes frequent quotations from Dr. Douglas, who has given a good account of the epidemic of 1810–11, as presenting itself in the Dublin Lying-in Hospital.

Dr. Douglas describes three varieties of puerperal fever, 1st, the synochal; 2d, the gastro-bilious; and 3d, the epidemic or contagious puerperal fever. Dr. Churchill observes, "that he (Dr. Douglas) has drawn a marked distinction between ordinary and epidemic puerperal," and as his description serves to illustrate in a measure our author's views on this subject, we make the following extract of his quotation from Dr. Douglas.

"That form of the disease which I arrange under the third head, is really the contagious, or epidemical puerperal fever, and though agreeing with the others in the great leading symptoms, inflammation, pain, tumefaction, and tension of the abdomen, yet differing from them in many material characters. The sensorium here is seldom in any degree disturbed, whereas, in others, it is so frequently, and even sometimes is excited to a high degree of delirium. The pulse here is usually from the moment of attack, soft, weak and yielding, and in frequency often exceeds 160; whereas, in the first species it is full, bounding, and incompressible, and in the second, small, hard and concentrated, and in both moderately frequent. The eye, instead of being suffused with a reddish or yellow tint, as in the others, is here generally pellucid, with dilated pupil; the countenance, instead of being flushed as in the others, is here pale and shrunk, with an indescribable expression of anxiety; an expression altogether so peculiar that the disease could, on many occasions, be pronounced or inferred from the countenance alone. The surface of the body, instead of being, as in the others, of a high pyrexial heat, is here usually soft and clammy, and of heat not above the natural temperature; and not only is the skin cool, with clammy exudation, but the muscles to the impression of the finger, feel soft and flaccid, as if deprived of their vis insita by the influence of the contagion. Indeed, there is such prostration of strength and depression of vital principle from the very onset of the attack, that I must suppose the contagion to act on the human frame, probably through the medium of the nervous system."

The author again quotes Dr. D. as follows:

"The contagious puerperal fever of Dublin is, I venture to pronounce, neither more nor less, than a malignant fever of a typhoid type, accompanied with an erysipelatous inflammation of the peritoneal covering of the stomach, intestines and other abdominal viscera."

The history, or more properly, the sketch of the different epidemics, proceeds from one to the other with great rapidity; that which occurred in 1813, in the northern countries of England, so ably described by the late Dr. Armstrong, is alluded to as closely

resembling the Aberdeen and Leeds epidemics, all the cases presented the same incontestible proofs of inflammation, and blood-letting—early and copious blood-letting—seems to have been the only successful mode of treatment. "All who were seized with the disease died,—who were not bled at the beginning." This is in accordance with the recorded statements of Hey and Gordon, and was doubtless excellent practice in those epidemics which displayed a strong inflammatory type.

The experience of Dr. Gooch is next adduced. Dr. Gooch agrees in all the principal points of treatment, but makes, however, a quotation from Dr. Farre, who states that "At the east end of London, not far from the river, this disease proved still more fatal. During the month of March, 1825, one surgeon lost seven, another four cases, in all of which the disease was treated at the instant of its formation by active blood-letting. A physician accoucheur who attended in consultation, told him (Dr. Farre) that, out of thirteen cases eleven died, that *all* which had been bled, died, and that the only two that recovered had not been bled, but were treated with turpentine.

Mr. Labatt's account of the epidemic that prevailed in Dublin in the years 1819–20, is highly interesting, and is well worthy of attentive perusal, both from its intrinsic merits and the high character of the author.

Mr. Labatt used every effort to prevent the spreading of the contagion; the sick patients were separated from the sound ones, scourings, fumigations, and white washings were called in requisition, but all to no purpose, neither cleanliness, nor ventilation, nor the destruction of the utensils and furniture that had been used by those already smitten, seems to have checked the march of the disease, nor lessened its frightful mortality. Dr. Labatt says: "That from sad experience of this epidemic, I am satisfied that the contagion of typhus fever is capable of giving rise to puerperal fever; that puerperal fever is communicable from one patient to another, and also that it can be carried from the sick by an attendant to women in child-bed who were previously free from disease."

This statement is strongly confirmatory of the opinion that there is a contagious form of puerperal fever. Such, we believe, is the opinion of most physicians of the present day.

An epidemic puerperal fever occurred in Vienna in the year 1819. The patients were attacked on the first, second, or third day after delivery; symptoms of inflammation of the peritoneum and uterus were always present. One patient died in six hours after she was attacked, others in twelve or twenty-four hours.

When the disease presents itself in so malignant a form, one mode of treatment is as good as another, or to speak more correctly, all treatment is equally useless, the powers of life give way at once, and we should imagine a man would as soon think of plunging his lancet into such a patient as he would of bleeding a corpse. "The very rapid putrefaction after death, the dissolved state of the blood, the strikingly soft and tender state of the whole bowels, the heart, lungs, liver, spleen, kidneys, and particularly of the uterus, indicated a colliquative, putrescent condition of the whole system induced by the disease."

Dr. Robert Ferguson's experience is given by one Methor, who states that in the general lying-in hospital, in the years 1835–38, every plan of treatment was tried—bleeding early and copiously, amongst the rest, without producing any good effect, or lessening in the smallest degree the mortality. Seeing that no treatment was of avail, the hospital was closed from May to November. Dr. Ferguson adds, "That the present year, 1838, has exercised an exceedingly fatal influence in every species of fever, all of which were of the low, or typhoid type."

An epidemic prevailed in Paris in the year 1829, in the practice of M. Desormeaux. Mr. Tonnellé, who has described the epidemic, traced the morbid lesions with great care in no fewer than 222 cases. We insert the following condensed summary of M. Tonnellés statements given by the author, not because they contain any pathological novelty, but to show how perfectly they agree with the post mortem observations of our own country.

"In 193 there were traces of peritonitis; in twenty-nine, or about one-eighth there were none.

"In 197 cases, or about nine-tenths, he found morbid lesions in the uterus e. g., simple inflammation of the uterine veins and lymphatics, and softening and putrescence of the uterine parietes.

"In 62 cases the ovaries were inflamed.

"In 90 cases there was inflammation of the veins; in forty of the lymphatics alone.

"In 49 cases the uterus was softened, superficially in 29, deeply in 20.

"In 29 cases there were the usual evidences of pleurisy; in six others an effusion of blood, and in eight of serum into the pleural cavities.

"In 27 cases the lungs were affected, viz., in ten there was pneumonia; in eight, abscess; in four, tubercles; in three, gangrene; in two apoplexy.

"There were purulent collections in the muscles in fourteen cases; in the joints in ten; and in the cellular tissue of the pelvis in six cases.

"Abcess of the liver existed in three cases, and of the pancreas in two cases."

The author adds, that "M. Tonnellé divides puerperal fever into three varieties; the inflammatory, the typhoid, which was the most frequent, and the anomalous or ataxic. "The more active remedies were general bleeding, leeches, ipecacuanha and mercurial salivation." It appears that fully one-third of the cases died.

Next we have the observations of Mr. Ceely of Aylesbury, who has described an epidemic which occurred in that city and its neighborhood in the year 1831, during the prevalence of erysipelas, which exhibited a mild, a phlegmonoid, and a typhoid form, the puerperal seems to have assumed analogous characteristics.

Mr. Ceely says that he had no opportunity of making a post-mortem in the acute cases, from which we presume that they all recovered, which, under active treatment, as far as our experience goes, they generally will. He examined some of the typhoid cases, and found most of the usual appearances, which have been described so often that it would be waste of space and time to repeat them.

"A report of the secondary midwifery institution at Vienna, by Dr. Bartsch, was published in the Lancet, in which it is stated that of 2218 women delivered at that institution between October 15th, 1833, and December 31st, 1834, 175 had puerperal fever, of whom 109 died."

In this report puerperal fever is distinguished from peritonitis and metritis as will be seen from the following quotation.

"The cases of puerperal fever occurred seldom under the form of puerperal peritonitis, but generally as inflammation of the uterine veins, giving rise to the production of puss in these vessels, and the general symptoms accompanying its absorption."

We confess that we are glad to see this distinction made between peritonitis and malignant puerperal fever; it is most rational, and will at once account for the different success of different modes of practice, point out in what cases we ought to bleed without hesitation, and where it would be advisable to use a discriminating judgment, and spare the vital power which is already sinking but too rapidly.

The following quotation is from Dr. Beatty's Report of the Lying-in Hospital, South Cumberland street, Dublin.

"The hospital was visited by this terrible malady twice during the period embraced by the present report. Both attacks took place in the month of January, and at each time erysipelas was raging as an epidemic in the surgical hospitals, and diseases of a typhoid type were very prevalent in the city."

Dr. Beatty lost eight patients out of thirteen. M. Voillemier, Paris, 1838, describes two forms of the disease, the inflammatory and typhoid. The inflammatory form generally yielded to active antiphlogistic treatment, though occasionally it terminated fatally. In the typhoid form the patients rapidly sank at the end of a few days or hours. There was no regularity in either lochia or milk. In a few cases M. Voillemier thought he could trace the origin of the disease to contagion.

"Epidemics of puerperal fever occurred at Rennes in 1842 and 1844, and have been described by M. Betral. The lymphatics were principally implicated, the veins being unaffected. The disease sometimes terminated in forty hours, but generally not before the fifth day. The mortality in the first epidemic was twenty out of twenty-four, and in the second, twenty out of twenty-two. There were purulent deposite in the lungs."

The disease also appeared in the Westminster Lying-in Hospital in the year 1842, an account of which has been given by M. Buddy.

A slight sketch of some other epidemics is then given, but as we labor under the apprehension of making our article too long, we omit them, and proceed to give an extract by our author, from Dr. McClintock, Rotunda Lying-in Hospital, 1845. The Dr. thus enumerates the peculiarities of the outbreak:

"1st. The very sudden and unexpected manner in which the epidemic appeared, without any of those precursory warnings which

have usually preceded its invasion. 2d. The remarkable circumstance, that of the fourteen children of the women attacked, five died: one of rapid trismus, one of erysipelas, and three of convulsions. 3d. That out of the ten fatal cases, nine were examined post mortem, which examination revealed the most extensive morbid appearances, quite adequate to account for death. 4th. During the same period that puerperal fever was in our wards, erysipelas was very prevalent in some of the surgical hospitals throughout our city. 5th. It is worthy of remark what a small detraction of blood was sufficient to bring on syncope in this epidemic. Nearly every case was bled as soon as the system had rallied from the rigor; but only one woman (who recovered) bore the loss of so much as fifteen ounces, whilst from six to eight ounces was about the average."

There are some other epidemics historically mentioned, but we presume that enough has been given to show the nature, and even to convey some slight idea of the merits of the article which cannot be appreciated too highly; though short, it must have cost the author much labour and research; and though he admits that the list is in all probability imperfect, yet we agree with him cordially that, so far, it is more complete than any with which we are acquainted. We recommend the careful perusal of it to all practitioners, along with the tables of the various epidemics, which the author has been at the pains to give us, in order to render it more intelligible, but which for obvious reasons could not be inserted here.

Having finished his summary, the author concludes with some few observations, rather as suggestions, to induce his readers to follow up the subject than as absolute inferences. They appear to us to be so judicious, that we shall make no apology for giving some of them, and as we before gave our readers a promise to that effect, we shall give them in Dr. Churchill's own words.

"I would remark then, in the first place, that there appears some especial connection between the epidemics of puerperal fever, and lying-in hospitals. I do not mean exactly to assert that these epidemics always originate with, and are kept up by, the hospitals; but I refer to the fact that we have no record of any epidemic independent of them in early times. The first in France, England and Ireland, occurred in the Hotel Dieu of the former, and the lying-in hospitals of the latter countries, and though our earlier authors allude to inflammation of the womb, &c., occurring in child-bed, they make no mention of its prevailing extensively as an epidemic."

The author then alludes to the almost universally admitted fact, that puerperal fever is always, or almost always, connected with local diseases, but adds that Dr. Copland, in an excellent article, has denied the universal presence of inflammation in the malady, and states that in one epidemic the only pathological characteristics observable were a remarkable alteration of the blood, general lacerability of the tissues, or loss of their vital cohesion soon after death. He adds, however, that such cases are rare.

We proceed with the author's remarks:

"I repeat my conviction that there are few if any cases of puerperal fever without local disease of the organs employed in parturition or the neighboring tissues; but are we therefore justified in asserting with Dr. Lee that puerperal fever is simply a local affection?

"I have latterly seen reason to doubt the truth of the view I formerly took, which was in accordance with that of Dr. Lee, and though I would wish to express myself cautiously and guardedly, I must honestly avow, that whilst I fully admit the existence of local disease, I do think that epidemic puerperal fever is something more than that, although I may not be able to define exactly what it is.

"We should be justified in this supposition I think on several grounds. First, the very remarkable variety of opinion as to its nature, would go far to prove that it cannot be the simple local disease Dr. Lee believes. For example, by some it is regarded as an inflammation of the uterus; by others inflammation of the omentum and intestines; by a third party as peritonitis; by a fourth erysipelatous inflammation; by a fifth and sixth as a fever sui generis, or with biliary disorder; by a seventh as a disease of a putrid character, &c. Such different views are hardly reconcilable with the notion of a simple inflammation."

We have long been of precisely the author's opinion, but he does not appear to have any very distinctly defined idea on the subject, and indeed the difference of opinion is so great, that it is hard for a man who seeks truth and not the gratification of his vanity, by the exemplification of some favorite dogma, to bring his mind to a conclusion. The arguments remind us forcibly of the history of the cameleon. The author proceeds with the following remarks.

"Then again look at the prevailing characters of different epidemics, and see how varied they are; in one the lochia are suppressed, in another they are profuse, in a third unaltered; diarrhœa is common in one epidemic, constipation in another; typhoid symp-

toms in one, ordinary fever in another. And as to remedies we find even a greater diversity: one very high authority recommends saline purgatives; another loses all his patients until he bleeds largely at the commencement; another loses those who are so bled. Calomel is the universal remedy in one epidemic, opium in another.

"Lastly, let any one compare a case of simple inflammation of the womb or peritoneum in child-bed, with a case of epidemic puerperal fever, their symptoms, course, and the effect of remedies, and I do not think that a doubt will remain upon his mind that, although the latter is a local disease, it is not exclusively so."

The author then enquires, what more is it than a local disease? discusses the peculiar effects of uterine phlebitis, states Mr. John Hunter's opinion that phlebitis destroys life by the extension of inflammation to the heart, a position which Dr. Arnott's investigations disproved, showing that it was probably owing to an alteration in the quality of the blood. "M. Bouillaud, in 1825, attributed the typhoid symptoms in phlebitis to the mixture of pus with the blood." Analagous results have been produced by injecting putrid matter into the system, and "Guthrie's descriptions," says Dr. Churchill, "of the characteristics of irritative phlebitis symptoms, &c., are very like those of puerperal fever."

Many authorities are quoted in support of the plausibility of the position that puerperal fever, occurring as an epidemic, is neither more nor less than typhus, modified by the peculiar condition of the female at the parturient time, and it is natural enough to suppose that those organs and their investments more immediately concerned in the process of labor, should, be most liable to be affected by the vitiated condition of the general system, and take on an unhealthy inflammatory action, producing all that local mischief which Dr. Lee and others have maintained is the whole disease.

When we take into consideration the fact that typhus and erysipelas frequently appear together, and during the same atmospheric conditions, the supposition that the local affection is of an erysipelatous character, is extremely plausible.

The following quotation from Mr. Nunnelly, is corroborative of the author's opinion on this subject.

"It is highly probable, if not certain, that there is some change produced in the state of the blood, which change may depend upon alterations we are unable at present to appreciate, but which it is

likely occur in many tissues, and may thus affect the mass of the blood more or less quickly, and to a greater or less extent, according to the influence they have upon, and the connection they have with the blood in a state of health."

The important subject of contagion is then discussed—various high authorities, both for and against the contagiousness of child-bed fever, are quoted; the author does not seem to be fully satisfied on this subject, but all that he says has been before the medical public so often, that we think it unnecessary to trouble our readers by calling their attention particularly to his opinions. They are, nevertheless, worthy of great respect, and may be read with advantage. One observation we quote as follows:

"As in all cases where a disease is epidemic, it is and must be a difficult thing to decide as to the contagiousness of puerperal fever; still I confess that the facts would lead me to the inference that, at least, it is communicable from a woman laboring under it to others in the same ward."

These remarks naturally lead to the consideration whether puerperal fever can or cannot be conveyed by a third party in health, from a person laboring under it to another person in child-bed. This is a subject of momentous importance to the practitioner of midwifery, and one which we heartily wish could be determinately settled; if it be as some have thought, (Gordon amongst the rest) that the medical attendant himself carries death into the chamber of his confiding patient, every conscientious man who meets with a case of puerperal fever, of a typhoid character, must be subjected to a fearful anxiety, for he must either continue his practice at the conscious hazard of destroying those entrusted to his care, or he must impoverish himself by abandoning his professional duties, a hard alternative to a man dependent for his living on such exertions.

Dr. Churchill does not seem to have settled this question either way to his own satisfaction, and certainly does not satisfy his readers; he says:

"So far as the weight of opinion goes, it is in favor of contagion, but I think we are scarcely yet in a position to speak quite positively."

After quoting many anecdotes of cases, in which the authors (men of high repute) assert that in their judgment the epidemic

was conveyed by the attending physicians from the sick to healthy women, he makes the following commentary: "'Post hoc' is not always 'propter hoc,' however, and we must not forget that puerperal fever was epidemic at the time." This remark has particular reference to some cases which occurred in Edinburgh in 1821–2.

The author winds up with the following remarks:

"The evidence and proofs thus adduced are of extreme importance, and I fear we must conclude, however reluctantly, in favor, not only of the contagiousness of puerperal fever, but of the possibility of its contagion being carried by an intermediate party. This makes the practice of midwifery doubly distressing during the prevalence of an epidemic, and ought deeply to impress us with the necessity of the utmost care and caution."

The article closes with the following quotation from Dr. Copland.

"An obstetric physician should not make an autopsy of a case of puerperal fever or of erysipelas, or of peritonitis, or of diffusive inflammation of the cellular tissue, or of the disease occasioned by the necroscopic poison; nor even attend, dress, nor visit any of such cases without observing the utmost precaution with regard to ablution and change of clothing, and allowing two or three days to elapse between such attendance and midwifery engagements, or visits to puerperal females."

We have thus traced, as connectedly as our space would admit of, the original portion of Dr. Churchill's book, viz., the historical sketch of puerperal fever. The essays, though never before published together, have been in the hands of the profession many years, and have been reviewed and commented on so frequently, that further notice of them would be

> "As tedious as a thrice told tale
> Vexing the dull ear of a drowsy man."

We will only add that the work as a book of reference is invaluable, and ought to form a part of every medical library.

THE MEDICAL EXAMINER.

PHILADELPHIA, AUGUST, 1850.

ASSIMILATED RANK.

On motion of G. C. M. ROBERTS, M. D., the following preamble and resolutions were unanimously adopted by the "Medical and Chirurgical Faculty of Maryland," at its convention, held June 5, 1850:

Whereas, Success in the medical profession requires intelligence, sound morality, and competent knowledge of the principles of medicine, as well as liberal education; and, *Whereas*, humanity and patriotism alike demand that all our fellow citizens who serve the Republic in the Army and Navy should be, when sick or wounded, accompanied by physicians as well instructed as any our country affords; therefore

Resolved, That the critical examination of candidates for admission into the Medical Departments of the Army and Navy tends to the improvement of medical education, and to secure competent medical officers in the military service of the country.

Resolved, That properly qualified members of the medical profession are *socially* the equals of members of any branch of the Army and Navy, and therefore should be assigned by law a respectable position in every military community.

Resolved, That the "MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND" regards with approbation the law of the United States which confers military rank upon medical officers of the ARMY, because it secures them an equality of rights and privileges with officers of other staff departments.

Resolved, That the "Medical and Chirurgical Faculty of Maryland" earnestly recommend that a similar law be enacted by Congress to place officers of the medical department of the NAVY on an equality of rights and privileges with other officers of this branch of the national defence.

Resolved, That the Secretary of the Faculty be, and is hereby directed to transmit immediately, copies of these resolutions, properly signed by the officers of the Faculty, to the Secretaries of War and of

the Navy, through the chiefs of the medical department of each service at Washington, and to the President of the Senate and Speaker of the House of Representatives of the United States, in order that the attention of Congress may be invited to the subject.

From the minutes.

WM. H. DAVIS, Secretary.

Extract from a pamphlet on "Assimilated Rank in the Navy," by a (presumed) Passed Midshipman.

"A law of Congress entitled, An Act for the better government of the Navy, approved April 23d, 1800, provides for the distribution of prize money according to the rank of officers in the Navy and Marine corps. Article 1st, provides for the proportion of commanders of fleets and squadrons, and commanders of single ships. Article 2d, provides for sea-lieutenants, captains of marines, and sailing masters. Article 3d, provides for chaplains, lieutenants of marines, surgeons, pursers, boatswains, gunners, carpenters, and master's mates.

"In each of these cases the order in which the different grades are enumerated, and the amount of prize money conceded, is indicative of the rank of the officer specified. Being a law of Congress, fully approved, it is as much a supreme law as any other portion of the existing naval code of which it forms a part, is in full force, and can only be repealed by the passage and approval of another act."

Whether the complement from this association or classification is in favor of the "boatswains, gunners, carpenters, and master's mates," or in favor of "chaplains, lieutenants of marines, surgeons, and pursers," is a question not discussed by our author, who seems to be satisfied that the law is good and sufficient, and that *his* reading is the true one.

R.

RESIGNATION OF PROFESSOR DUDLEY.

We learn, from the *Transylvania Journal of Medicine*, that Prof. B. W. Dudley has resigned the chair of Surgery, which he has occupied for more than a quarter of a century. Dr. Dudley is well known as one of the most distinguished surgeons of our country, and is especially celebrated for his unprecedented success in the operation of lithotomy.

LIEBIG, the distinguished chemist, is about to visit the United States, and contemplates giving a series of lectures in the various cities.

From the N. Y. Medical Gazette we glean the following items of medical news:

RESIGNATION OF PROF. MOTT.

Dr. Valentine Mott, professor of surgery in the University of New York, has tendered to the proper officers his resignation. The cause which led him to take this step, was the appointment of Dr. Detmold to the chair of Theory and Practice. Dr. Mott, it appears, was in Europe at the time, and transmitted his resignation, conditioned upon the continuance of the appointment of Dr. Detmold; whereupon Dr. Detmold promptly resigned the chair to which he had been appointed, and it is understood *both* resignations have been accepted.

Dr. Hull, of Baltimore is about to issue a new monthly paper, to be entitled the "Baltimore Medical and Surgical Journal."

Dr. Van Buren, of New York, has lately removed successfully an ovarian tumor, of fibrous character, by the large abdominal section. The same surgeon has successfully performed amputation at the hip joint.

The Medical Faculty of the University of New York have published an official invitation for applications to fill the two vacant chairs in that institution, viz., the Professorship of the Principles, Practice and Operations of Surgery, and that of the Institutes and Practice of Medicine.

HOMŒOPATHY CONDEMNED BY THE LAW.

Marine Court.—Before Judge Lynch. Homœopathy.

E. Rossi Corsi v. *Max Maretzek.*—To recover $100, balance for services as singer at the Opera House, the defence to which was that plaintiff had incurred a forfeiture of $100 by not performing, or personally giving notice of illness, under certificate of the Doctor of the Opera House, on February 23, agreeable to the regulations already referred to. The decision in this case as to Homœopathic physicians having been somewhat misunderstood, we give the portion of the opinion which refers to it.

"The Court, after stating that it was shown by physician of plaintiff, and who it is said was proved to be a regular M. D., that plaintiff was unable that night to perform, and expressing its concurrence in the view

that at such an establishment as the Opera House, strict discipline should be maintained, and the penalties upheld, says: 'But I feel bound to regard the rule of evidence which requires in cases of penalty and forfeiture, strict proof of its being incurred—the objection to the evidence of the attending physician is technical and strict, and before defendant can avail himself of it, he must show that he has fully complied with what was to be done on his part. The rule stuck up at the Opera House is in these words: 'Sickness must be proved by the *doctor* employed by the director.' Now, though it is proven there was a notice posted up in the Opera House that Dr. Quinn was employed by the director, yet *it has not been proved on this trial that Dr. Quinn was a doctor, or that he had taken a degree as Doctor of Medicine, or that he was authorized by the Medical Society, or had a regular license to practice, which I think was necessary in order to constitute him a doctor, and to show a regular appointment under the rule*, and which I do not feel at liberty in such cases to supply by inference. So far as there is evidence on the subject, it went to show that *Dr. Quinn practiced upon principles of homœopathy, and that such practitioners are not recognized by the faculty of medicine, nor by a majority of the public, as regular practitioners.* Under these circumstances, I am of opinion that plaintiff was authorized to make proof of his sickness by his attending physician; and as such proof was made to my satisfaction, I think the plaintiff is not subject to the fine, and give judgment in his favor for $100, the amount.'"

DEATH OF THE PRESIDENT OF THE UNITED STATES.

This melancholy event, which has shrouded our land in mourning, took place under circumstances which are well calculated to illustrate the importance of a much stricter regard to the laws of health and life, of which we have taken occasion to speak in a former number of the *Gazette*, than is usually exercised on the part of aged persons, whose vitality is inadequate to sustain a severe shock of disease.

It has been stated in the newspapers, that the death of Gen. Taylor was caused by a bilious remittent fever of congestive character, superinduced by an attack of Cholera Morbus. But what were the pre-existing causes to which the onset of this latter disease is to be ascribed? On the same authority we learn that the illustrious chief passed the day in a crowded assembly participating in its celebration by exposure to a temperature of near 90° in the shade, until he returned home in a state of exhaustion and hunger, which prompted him to indulgence of

a full meal, of which he felt urgent need. Of the extent of this meal, and the variety of dishes of which he partook, we have not been accurately informed, but it is stated that he ate heartily of *boiled cabbage, stringed beans, cucumbers, cherries and other raw fruit, with milk*, while his system had been enfeebled by long fasting, toil and heat, as well as by the excitement incident to the occasion.

That such a meal, under such circumstances, by a man of 66 years of age, was indiscreet, cannot admit of a doubt, even if these several articles were eaten in moderation as to quantity. Digestion and nutrition of such a medley of ingesta, were wholly out of the question, and hence all these combustibles became subject to chemical laws; and fermentation in the stomach, and the subsequent explosion called Cholera Morbus, might have been predicted with certainty, especially in a temperate man, who habitually abstained from stimulating drinks, as did General Taylor.—*N. Y. Med. Gaz.*

MACLISE'S SURGICAL ANATOMY.

We have received from the publishers, Messrs. Lea & Blanchard, the third number of this admirable reprint, containing the Surgical Anatomy of the Inguinal and Femoral Regions most graphically depicted. We are obliged, for want of room, to postpone the critical examination of it until a future number. In the meantime, we feel safe in saying, that it contains the best exposition of the different varieties of hernia that we have ever met with.

Dr. T. O. Edwards, of Cincinnati, has been appointed Professor of Materia Medica and Pharmacy in the Medical College of Ohio.

We regret to learn the death of Dr. John T. Shotwell, Professor of Anatomy in the Medical College of Ohio. He is said to have died of Cholera.

ERRATUM.

The word *spasmodic*, in the third line of Dr. Slusser's article on Nitrate of Silver, should read *sporadic*.

Deaths in Philadelphia from June 22d to July 20th, 1850. Reported by Mr. James Aitken Meigs, Student of Medicine.

Diseases.	Ad'ts	Chil.	Diseases.	Ad'ts	Chil.
Anæmia,	0	1	Fever, typhoid	3	3
Aphthæ,	0	3	" typhus,	3	1
Apoplexy,	14	0	Fracture of skull,	0	2
Asphyxia,	0	2	Gangrene of foot,	1	0
Asthma,	0	1	" lungs	1	1
Burns and Scalds,	1	3	Hæmoptysis,	1	0
Cachexia,	0	1	Hemorrhage from gums,	0	1
Cancer,	1	0	Hernia,	3	0
" breast,	1	0	Hydrocephalus,	0	36
" liver,	1	0	Hydropericardium,	1	0
" stomach,	3	0	Hydrothorax,	1	1
" throat,	1	0	Inanition,	0	7
Caries of spine,	0	1	Inflammation of brain,	6	25
Casualties,	7	9	" bronchi,	4	6
Cholera,	4	0	" heart,	1	1
Cholera infantum,	0	211	" kidneys,	1	1
" morbus,	7	5	" larynx,	0	3
Concussion of brain,	0	1	" liver,	2	1
Congestion of lungs,	0	4	" lungs,	5	15
" brain,	3	13	" peritoneum,	1	1
Convulsions,	1	60	" stom. & bowels,	5	14
" puerperal,	2	0	" uterus,	2	0
Croup,	0	4	Intemperance,	3	0
Cyanosis,	0	3	Intussuseption,	1	0
Debility,	3	11	Jaundice,	0	2
Dementia,	1	0	Malformation,	0	4
Diabetes,	2	0	" of heart,	0	1
Diarrhœa,	13	30	Mania-a-potu,	9	0
Disease of brain,	2	11	Marasmus,	1	42
" chest,	0	1	Measles,	0	4
" heart,	7	1	Old age,	19	0
" liver,	0	1	Palsy,	4	0
" lungs,	0	4	Perforation of intestines,	0	1
" spine,	0	1	Phthisis pulmonalis,	44	16
" stomach and bowels,	0	6	Pertussis,	0	13
Dropsy,	5	3	Poisoning,	0	1
" abdominal,	1	0	Scirrhus of liver,	1	0
Drowned,	7	9	Scrofula,	0	3
Dysentery,	22	43	Small pox,	3	6
Effusion on brain,	1	9	Still born,	0	47
Enlargement of heart,	1	0	Spina bifida,	0	1
Epilepsy,	1	0	Spasm of intestines,	0	1
Erysipelas,	0	3	Suicide,	2	0
Exhaustion,	0	1	Sunstroke,	0	1
Fever,	2	2	Tabes mesenterica,	0	2
" intermittent,	0	1	Teething,	0	2
" puerperal,	2	0	Tetanus,	1	0
" remittent,	3	2	Tuberculosis,	0	4
" scarlet,	2	32	Tumor of larynx,	0	1

Diseases.	Ad'ts	Chil.	Diseases.	Ad'ts	Chil.
Ulceration of throat .	0	1	Violence, . . .	1	0
" bowels, .	2	0	Wounds, . . .	0	1
Unknown, . . .	5	9		258	776

Total, ... 1034

Of the foregoing the ages were as follows:—

Under 1 year,	-	-	-	470
From 1	to -	2,	- -	152
2	- -	5,	- -	67
5	- -	10,	- -	45
10	- -	15,	- -	18
15	- -	20,	- -	24
20	- -	30,	- -	66
30	- -	40,	- -	55
40	- -	50,	- -	38
50	- -	60,	- -	38
60	- -	70,	- -	28
70	- -	80,	- -	25
80	- -	90,	- -	6
90	- -	100,	- -	2
				1034

Included in this number, are 66 from the Almshouse, 16 from the surrounding country, and 18 people of color.

RECORD OF MEDICAL SCIENCE.

SURGERY.

Self-inflicted wound of the throat, laying open the Œsophagus—Recovery. (Under the care of Mr. Adams.)—Wounds of the throat in persons who attempt to commit suicide, may be of a trifling kind, or cause death instantaneously, either by hæmorrhage or suffocation. There are between these two extremes a great variety of lesions resulting from self-inflicted wounds of the throat, placing the patient in a more or less dangerous situation; among these, the complete division of the thyroid and cricoid cartilages, with a subsequent wound of the œsophagus, are looked upon as extremely hazardous, and the management of such cases requires great care and nicety. It is, however, satisfactory to notice, that an enlightened and close attention to the treatment may triumph over the numerous difficulties which lie in the way of recovery when the wound is of the above mentioned destructive descrip-

tion; and it is our pleasing duty to record a case, lately under the care of Mr. Adams, where favourable results were obtained.

From the notes of Mr. Ball, the house-surgeon, who very courteously afforded us frequent opportunities of seeing the patient, we are enabled to give the following details. On the 28th of February, 1850, a man, about twenty-five years of age, of thin, spare make, and a salesman by trade, was admitted into the hospital with an oblique incision in the anterior part of the throat, extending from above the thyroid cartilage to the fourth ring of the trachea. Both the thyroid and cricoid cartilages, and the three first rings of the trachea, were divided; the knife had passed between the sterno-hyoid and sterno-thyroid muscles, and had slightly lacerated them at their inner edges; the isthmus of the thyroid body was laid bare, but not divided. This desperate wound was inflicted by the patient's own hand while under considerable excitement, with a common table-knife, about an hour previous to admission. The hæmorrhage had been considerable, but had ceased when the patient entered the hospital; the lungs, however, contained a large quantity of blood, which had passed into the trachea, and this fluid, excited by its presence in the lungs, constant cough, with expectoration of the blood through the wound in the throat.

This fact again proves how seldom the suicide succeeds in wounding the common carotid artery or jugular vein, the hæmorrhage mostly proceeding from some of the primary branches of the external carotid. Here it would appear, that the violence used was expended upon the division of the hard bodies above mentioned, viz., the thyroid and cricoid cartilages, the rings of the trachea, and, as will be seen below, part of the œsophagus, these organs being probably rendered prominent by the head having been thrown backwards. The cut was likewise an oblique one, and was therefore less likely to reach to a greater distance posteriorly.

The patient, under these circumstances, was immediately put to bed, his head and shoulders were raised by means of pillows; a silver tube was passed into the trachea to facilitate the ejection of the blood; and lint, wet with cold water, applied to the wound. Mr. Adams saw the patient a few hours after admission, when the breathing was much easier, a large quantity of blood having been expectorated through the tube. Mr. Adams approved of what had been done, and ordered thirty drops of tincture of opium to be given to the patient without a vehicle, so as not to tax the powers of deglutition; but he swallowed this small quantity of fluid with great difficulty, and the attempt excited a violent fit of coughing. The patient made, towards the evening, several unsuccessful attempts to swallow small quantities of milk, but the greater portion of it passed into the trachea and caused violent cough; the milk, at the same time, escaping by the wound in the windpipe.

These phenomena confirmed Mr. Adams in the previous suspicion of wound of the œsophagus; the canula was therefore removed from the wound in the trachea, and an attempt made to pass a flexible tube into the stomach; this was, however, found impracticable, for the tube invariably passed through the wound in the trachea, instead of gliding down from the pharynx into the œsophagus, and excited an alarming amount of irritation. No doubt now remained regarding the wound

having reached the œsophagus; and as no tube could be passed into the stomach, Mr. Adams had recourse to enemata for nourishing the patient. A pint of beef-tea was therefore injected; the man was allowed to moisten his mouth with a wet rag, and as he breathed quite freely through the wound, it was not thought advisable to replace the canula into it.

This method of administering food by the rectum is invaluable in such cases, and the patient owes his life to this measure; it is a pity that it is not invariably adopted in analogous circumstances. The case of a child, for instance, was lately mentioned at the Surgical Society of Paris, who had died of inanition. The little patient had had tracheotomy performed upon him to ward off impending suffocation from croup; as the food subsequently passed through the opening in the trachea, the œsophageal tube was thought of, but could not be used, owing to the inflamed state of the larynx; the child died. It is not too much to suppose that the child might perhaps have been saved by nourishing enemata.

The difficulty of deglutition in Mr. Adams's patient went on increasing on the second day; even the swallowing of his saliva gave him great pain; he was therefore ordered half a pint of beef-tea to be injected into the rectum three times daily. In the night the patient spoke once or twice in a whisper; but strict silence was enjoined, as the effort of speaking excited fits of coughing, which left him greatly exhausted. The bowels having been relieved on the next day after admission, Mr. Adams ordered thirty drops of the tincture of opium to be administered in a starch enema of one ounce, towards the evening, to procure rest. The patient was likewise removed into a private room, as the cold air excited cough. This change to a higher temperature proved very beneficial; the irritation about the air passages diminished considerably; there was much less cough; and a very evident improvement was noticed in the patient's countenance. He, however, was much tormented with thirst, to satisfy which, Mr. Adams ordered an enema composed of a pint of cold milk, and directed a small piece of ice to be placed in the patient's mouth. The wound, in the meantime, went on very favorably, and was dressed solely with lint dipped in cold water.

On the fifth day the patient was able to speak in a whisper without pain or exciting cough, and there was great improvement; he was nourished entirely by beef-tea and milk enemata, with the administration of thirty drops of tincture of opium by the same means every night, the bowels being kept regular. On the eleventh day after admission, he began to take a small quantity of bread and milk by the mouth, which he succeeded in swallowing without any difficulty. The wound had in the meantime rapidly filled up, and was now about one-fourth of its original size. Beef-tea, milk, rice-pudding, and porter, were soon taken by the mouth, and the patient improved rapidly up to the twenty-third day after the rash act, when symptoms of constitutional disturbance appeared, and pain was complained of both in the head, neck, and shoulders. A purge of calomel and rhubarb, and a blister to the temples, did not succeed in removing these symptoms; the tongue became tremulous and the pulse weak; the patient was therefore prescribed bark with half a grain of hydrochlorate of morphia at night, and by the assistance of wine, porter, &c., he regained his strength; the wound

healed completely, and the patient was discharged in a very satisfactory condition forty-one days after admission. He was still holding his head rather erect, however, and his voice was somewhat indistinct; but it is to be supposed that with the eventual perfect consolidation of parts within the trachea, and subsequent absorption of exuberant fibrinous deposits, the voice will regain its former tone. It will be noticed that no vessel required tying, and that no secondary hæmorrhage took place; and as certain, not unimportant, branches of the external carotid *must* have been divided, the fact of the cessation of the bleeding will be an additional illustration of the retracting power of arteries, when completely divided. Nor should it be passed unnoticed how well was exemplified in the foregoing case the propriety of avoiding plaster and sutures, as is generally advised by systematic writers when treating of wounds of the thorax.—*Lancet.*

Strabismus.—Division of the Rectus by means of Lane's Knife made by Savigny.—Every improvement in surgery is interesting, and we eagerly seized the opportunity afforded us by the kindness of Mr. Gay of seeing this instrument used. It is a small curved bistoury, with a partially blunt point. The patient was a little girl. Placed under the influence of chloroform, Mr. Gay, having fixed the eye, introduced the knife by the under side of the rectus, and, holding it flat, passed it vertically on. Owing to its peculiar construction, it went close under the tendon, the point becoming prominent on the other side. On this the operator placed his finger, turning the knife up, when it cut its way out. A second touch of the knife was required, whereupon the globe of the eye instantly resumed its normal position. As nothing can be more simple than this instrument, we sincerely wish to see it tried still further. Its advantages, we are given to understand, are, that from its construction, its point will pass through all the textures external to the sclerotic, but that no force can make it penetrate this membrane.—*London Med. Times.*

OBSTETRICS.

Cases of Pregnancy, notwithstanding previous severe injury to the organs concerned in Childbirth. By Dr. Leopold, of Meeran, Schonburgh.—*Case* 1.—Mrs. —— was delivered with instruments, on the 1st of January, 1843, by an experienced accoucheur, and suffered considerably from ischuria on the following day. On the 6th, Dr. Leopold saw her in consultation. A large hard tumor, tender to the touch, filled the greater part of the vagina. The nature of this tumor was doubtful, and continued so until the 9th inst., when, having taken a strong purgative, she felt during its action a substance pass from the vagina. Copious hæmorrhage occurred, followed by syncope. On examination the prolapsed and inverted uterus was found between her thighs, lying in a pool of blood, urine and fæces. It was immediately washed and returned. The hæmorrhage ceased; the fundus uteri could

be felt beneath the abdominal parietes. The patient was confined to the recumbent posture for many weeks. She perfectly recovered her health, and was delivered of another child two years afterwards without instrumental aid. In this case it is possible that partial inversion of the uterus may have been occasioned at the time of delivery by adhesion of the placenta, and that the subsequent accident converted this into complete inversion and prolapsus.

Case 2.—Mrs. ——, the mother of five children, was in labor on March 30th, 1844. The arm presented, and it was necessary to turn. During the operation the patient exclaimed that she was suffering excruciating pain in the left side of the pelvis. She threw herself about in the most inconvenient positions just as Dr. Leopold had reached the foot. Much care was required to complete the delivery, as the pains also flagged. The placenta was expelled without hæmorrhage. At midnight of the same day Dr. Leopold was summoned to her, and found her lying with all the symptoms of severe hæmorrhage, but only a few ounces of blood were found in the bed. On passing the hand into the vagina several large coagula were expelled. The uterus was found lying over to the right side of the pelvis. The os uteri was open, and the uterus contained some coagula, which were quickly expelled by the contractions of the organ from external and internal stimulation. On the left side of the vagina, the hand entered a large sac full of blood. The orifice of this sac was about an inch from the os uteri, and was sufficiently large to admit the hand without force. Its walls were formed by the iliac bone, by the abdominal parietes, as high as the crista ilii, and by the iliacus internus muscle. A large quantity of coagulated blood was removed, and further hæmorrhage restrained by continued external application of cold. The patient refused all internal remedies. The prognosis was unfavorable. The extent of the injury indicated a remote origin; and, on inquiry, it was learnt that the patient had suffered from pain in the left side and hip during the whole period of her pregnancy, but had been compelled to follow her work at the loom.

The pains during labor were frequent and violent. A short time before the rupture of the membranes she had experienced a sensation as of a sudden and painful giving way of the parts on the left side. She had suffered from peritonitis after her previous confinement. A chronic abscess had no doubt existed in this spot, and was ruptured during labor by the force of the pains and the cross position of the child. The patient had again on this occasion an attack of puerperal fever, from which she recovered in three weeks. A purulent discharge continued for upwards of three months, after which she perfectly regained her health and strength, with the exception of diminished power in the left hip joint. Two years afterwards she was again confined, without any unfavorable occurrence.—*Lond. Med. Gaz.*

PATHOLOGY AND PRACTICE OF MEDICINE.

KING'S COLLEGE HOSPITAL.

Continued Success of the Kousso in promoting the Expulsion of the Tape-worm.—In former numbers of the Lancet, (March 16, 1850, and April 20, 1850,) cases were noticed in which the Kousso was found very efficacious for procuring the expulsion of the tænia solium. This plant is now acknowledged to be so useful in tape-worm, that it seems almost unnecessary to adduce new cases; we shall, however, just sketch a few of those which were lately benefited by the Kousso, as they present various features of interest.

The first case, as taken from Mr. Jordan's notes, runs as follows:—Rebecca R., aged 22, is a native of Wapping; she went to Devonport when seven years of age, but only stayed there about a fortnight; with this exception she has constantly lived in town, generally at Wapping, but about eighteen months ago she spent a year at Peckham. Patient's sister, who has been dead nine years, also suffered from tape-worm, which remained upon her to the time of her death. Patient likewise knows of a neighbor of hers in Wapping, close to her own home, who suffers from the tænia. This latter person and the above-mentioned sister are the only people she knows to be thus affected. The water is supplied by the New River Company to the whole neighborhood.

Patient was quite healthy until about two years ago, since which time she has had great pain in the side and stomach; her appetite was good, but she used to feel sick on first getting up; she had, however, no idea that she harbored a tape-worm until a week before Christmas, when she first passed joints of it, and from that period, such joints have been passed almost every day.

Twice since she first noticed the joints she has passed long pieces of the worm, once after opening medicine, the other time without any such agency. She has never taken any turpentine nor any other remedy expressly for the worm.

Patient was admitted under the care of Dr. Budd, and took the Kousso at half-past nine in the morning, the day after her admission; and, after taking a dose of castor oil in the middle of the day, the worm was passed with a motion at a quarter to five in the afternoon. This entozoon was nearly three yards in length, and the narrow segments approaching to the head were attached to it, though not the head itself. The medicine gave patient a slight feeling of sickness, which soon went off again. Her appetite was bad on the day she took the Kousso, and she felt weak. With the exception of the tape-worm patient seems to have generally had good health; she has only a slight cough. Her mother and sister died of phthisis, but patient's appearance is remarkably florid and healthy. The day after admission, this woman left the hospital in good condition, without passing any more of the worm.

The second case was admitted under the care of Dr. Todd. The subject is a young woman, native of Scotland, *four months advanced in*

pregnancy. She complained to Mr. Steele, the house-physician, that she was in the habit of passing long *round* worms, but when she brought the joint, which she had lately evacuated, they were found to be pieces of the tænia solium. When the nature of the worm was ascertained, the patient was admitted into the house, and took the Kousso in the morning; at seven in the evening she went home, and a quarter of an hour after she had reached her residence, she passed five yards of the worm.

The third case was sent to Dr. Todd from the country. The patient is a middle-aged woman, residing at Bow, who took the Kousso at three o'clock in the afternoon, and left the house immediately afterwards, promising to bring the worm as soon as she should evacuate it. The next morning she brought a tape-worm measuring about six yards in length.

The fourth case, who was admitted under the care of Dr. Budd, is that of a man, about 46. His health has, in general, been pretty good; last winter, however, he was attacked by cholera, and treated in King's College Hospital. Whilst laboring under this disease, patient did not pass any joints of the tape-worm, though previous to his being visited by the epidemic he had now and then evacuated portions of the tænia. When convalescent, he took some oil of turpentine, and by the agency of this medicine he voided a few joints. From that period he continued passing joints, and was admitted under the care of Dr. Budd, May 3, 1850. Patient took the Kousso in the morning, and had two doses of house medicine in the course of the day. At six o'clock in the evening, he passed a tape-worm of a very great length, since it measured nearly ten yards. The next day he voided a piece, six inches long, which came evidently from very near the head. It is to be regretted, as we stated before, that this medicine is so expensive; still, when it is considered how rapidly and effectually it promotes the evacuation of the tænia, the 17*s*. 6*d*. can hardly be looked upon as a high price; the more so, as in hospital practice, the patients need stay in the house but a short time. It will be extremely interesting to keep an eye upon these patients, in order to ascertain whether the benefit is of a lasting or temporary kind.—*Lancet*.

Case of "White Blood."—Dr. Bennett mentioned, that there was at present, in the male clinical ward, a boy affected with extreme enlargement of the spleen. On examining a little of his blood microscopically, a very large amount of corpuscles was discovered, quite undistinguishable from pus corpuscles. There were many features of interest in this case; it was the second of the kind which had fallen under Dr. B.'s observation, and he proposed, at some future period, to lay before the profession the conclusions to which it led. Meanwhile, any member of the society had an opportunity of examining the case in the infirmary.—*Ibid*.

CHEMISTRY.

On the changes which Ether, Alcohol, and bodies of a similar constitution, suffer when taken into the Cirulation. By CHARLES W. WRIGHT, M. D., of Cincinnati.—The rapidity with which certain substances manifest their action when taken into the circulation, has often engaged the attention of medical men, and more especially so since the discovery of the remarkable anæsthetic properties of the ethers, naphtha, and chloroform.

It is observed that when a medicinal substance is inhaled, much less is required to produce its characteristic effects than when it is administered by the mouth; and it is often stated that therapeutic agents operate quite differently when taken into the stomach, from what they do when inspired. This difference seems to be more apparent than real, as I think a thorough examination into this subject would plainly show; and if there be a difference, it is more in degree and rapidity than in kind.

Ether and alcohol are the first that will be considered under this head.

The first effect of the inhalation of the vapor of ether is to stimulate the system powerfully, but this state of excitement soon passes off, and is rapidly succeeded by a lethargic condition of the system, the skin becoming cold and pale, lips of a livid hue, slow and laborious respiration, in fact coma supervenes, and this in from two to five minutes. Introduce the same substance, but in larger quantity, in the liquid form, into the stomach, and what then occurs? why the same train of symptoms precisely, but which are much slower in making their appearance, and which are protracted a greater length of time. That it should require a larger quantity of ether to produce these effects through the medium of the stomach than the air passages, is obvious, for when ether, in the form of vapor, is enhaled, being exposed to a great extent of absorbing surface, it passes at once into the circulation, and there meeting with oxygen in a very active form, enters into combination with it, forming carbonic acid and water, being attended at first with excitement which retards the supervention of coma. The combustion of the ether is very rapid at first, but as the oxygen is consumed it fails to perform its task of purifying the blood, the consequence of which is, carbonic acid accumulates in that fluid, and death is finally brought about in precisely the same manner as if the patient had in the first instance inhaled carbonic acid gas. The impression which I wish to convey may be illustrated by comparing the inhalation of ether to the common experiment of plunging a lighted taper into a vessel of oxygen gas. In that case the combustion begins with great energy, but the flame grows less and less, until it is finally extinguished. Now there are two causes in operation tending to retard and ultimately arrest the combustion in this experiment; the first is the gradual disappearance of the oxygen from the vessel in which it is contained, the second is the influence which carbonic acid exerts in diminishing the combustion going on in flame.

The excitation of ether, when first administered, is very rapid; but as carbonic acid is generated in proportion as it is consumed, and the blood in other respects fails to be decarbonized, the excitement is soon succeeded by lethargy, the person dying as if poisoned by carbonic acid; the symptoms and post-mortem appearances being the same in both cases. In the former, the poison is formed by combustion going on in the system, but in the latter it is formed out of the system and inhaled.

The arrest of the circulation is not unlike that which results from the respiration of nitrous oxide gas, but from a different cause. When the exhilarating gas is inhaled a considerable length of time, the pulmonary capillaries no longer have an attraction for venous blood, it being saturated with oxygen. Carbonic acid produces just the opposite state, by charging the blood throughout the body with carbonic acid, and destroying the attraction which the systemic capillaries have for the blood in the arteries. Great irritability is induced by the former substance, and the heart continues to pulsate even after the circulation in other respects has ceased.

When taken into the stomach ether produces the same set of symptoms, with this difference, that the stage of excitement lasts longer, and if the quantity taken be not too large, gives the system time to throw it off in the form of water and carbonic acid. Even here, however, if an overdose be swallowed it may prove fatal, the symptoms being the same as when it is respired.

The symptoms ocasioned by the introdution of alcohol into the circulation, are much the same as those produced by ether. This will appear evident when we look at the composition of these two bodies. Alcohol is represented by the formula $C_4 H_5 + O\ O$. Ether has the same constitution, $C_4 H_5 + O$, minus one atom of water, H O.

When consumed, they both yield the same products. That of ether $12\ O + C_4 H_5\ O4 = C\ O_2 + 5\ H\ O$. That of alcohol $12\ O + C_4 H_5\ O + H\ O + = 4\ C\ O_2 + 6\ H\ O$.

Naphtha has been used as an anæsthetic agent, and it probably operates on the same principle, but from its producing a very rapid and fluttering pulse, its employment is not considered safe.

Carbonic oxide produces a pleasing delirium before it narcotizes, if gradually introduced into the lungs; but cases of poisoning with this gas are exceedingly rare.

That there are other influences operating here, I do not pretend to deny, but that the characteristic effects of these agents are produced in the manner set forth, I think a thorough examination of this subject in all its bearings would not fail to show.—*Western Lancet.*

MATERIA MEDICA AND THERAPEUTICS.

Method of depriving Quinine of its Bitterness.—Believing that I have discovered a method by which quinine may be quite deprived of of its great bitterness, without injuring its virtues in the least, I wish to make it known to the profession. Perhaps I have been anticipated, but if it be so I am not aware of it.

In August last, having occasion to prescribe for a little patient, who was affected both with diarrhœa and intermittent fever, I ordered a combination of quinine and tannic acid. The child took it so readily that I tasted it, and was surprised to discover no taste of quinine, which I at once attributed to the combination.

I have since prescribed it in a number of instances, and found that whilst it was equally effectual, it was far more palatable than any other combination of quinine I was acquainted with. On referring to the American Journal of Medical Sciences, Vol. xix., page 219, (1836,) it will be found that Dr. Ronander, Secretary of the Swedish Medical Association, recommended the tannate of quinine and cinchonin as the most active ingredients of the Peruvian bark. He asserts that he has cured, by their means, several cases of obstinate ague, which had resisted the use of sulphate of quinine, and other powerful remedies. Nothing is said in the extract from the original paper in Hecker's Annals, December, 1834, of the taste of the tannate of quinine. Compared with the sulphate, it is almost tasteless.

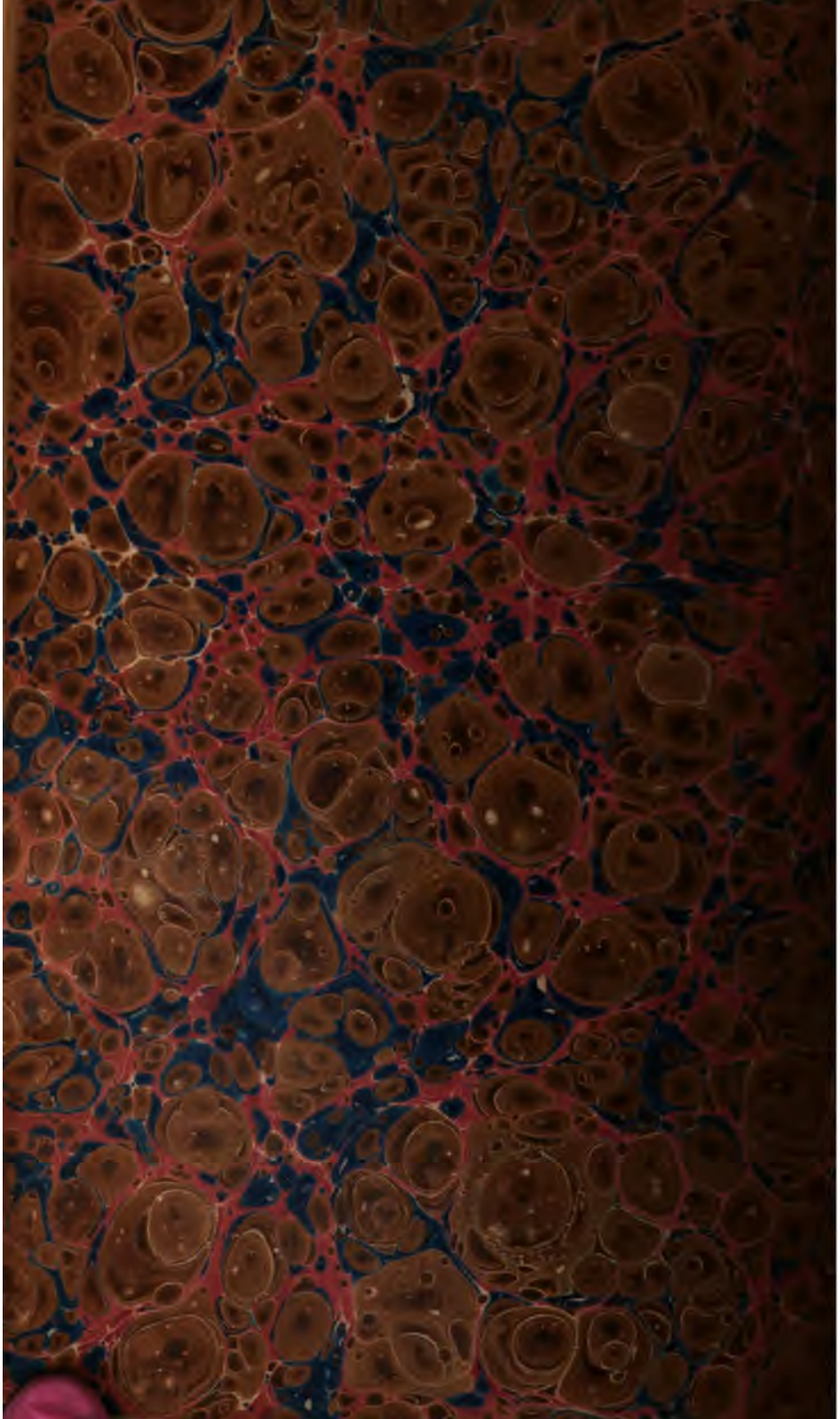
The following is the extemporaneous prescription I am in the habit of ordering for a child two years old —

R. Quiniæ sulph. gr. x.;
Acid. tannici gr. ij.;
Aquæ, ʒvj.;
Syrup aurant. ʒij. M.
A teaspoonful every hour or two.

I enclose a note on the subject from one of our most intelligent and careful apothecaries:—

Dear Sir,—I find, after trying a number of times, combinations of quiniæ sulphas and acidi tannici, in different proportions, that ten grains may be deprived of its bitterness in a great degree by the addition of one grain and a half of tannic acid. I think this is a proper proportion.

J. V. D. Stewart.

Dr. Thomas of Baltimore in American Journal of Medical Science.

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